

STIC Database Tracking Number: 314518

To: Ella Colbert
Location: KNX 4A21
Art Unit: 3696
Date: 11/17/2009
Case Serial Number: 09/884375

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Search Notes

09/884375
BROWSE HIERARCHIES CUSTOMIZED FOR RULES BASED CUSTOM CATALOGS

Dear Examiner Colbert:

Please find attached the results of your search for the above-referenced case. The search was conducted in Dialog.

I have listed *potential* references of interest in the first part of the search results. However, please be sure to scan through the entire report. There may be additional references that you might find useful.

If you have any questions about the search, or need a refocus, please do not hesitate to contact me.

Thank you for using the EIC, and we look forward to your next search!

**EIC-Searcher identified "potential references of interest" are selected based upon their apparent relevance to the terms/concepts provided in the examiner's search request.*

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I. Potential References of Interest

22/3,K/2 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2009 Gale/Cengage. All rts. reserv.
02277622 SUPPLIER NUMBER: 54082322 (USE FORMAT 7 OR 9 FOR FULL TEXT)
DATA MINING FOR DIRECT MAIL: A Lesson in Predictive Modeling.
SAARENVIRTA, GARY
Intelligent Enterprise, 2, 4, 41(1)
March 9, 1999
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 6161 LINE COUNT: 00504

... Intelligent Miner for Data permits interactive drill-down into all the presented visualizations. Figure 5 shows a tree model visualization. A tree model uses logical rules to split the data into smaller and smaller subsets. For example, a tree leaf could be defined by customers with tenure less than 50 months and total purchases greater than \$1,000. The highlighted leaf in Figure 5 has a response score of 0.69, and the rule generated by the tree applies to 52 records in the training set. The tree assigns scores to the records in a leaf by calculating the...

...that all the records in the leaf had an objective variable value of 1. A score of 0 implies that all the records in the leaf node had an objective variable value of 0. A score of 0 or 1 in a leaf node is very good; it implies that the tree rule used to create the leaf perfectly predicted a set of customer records. The rule used to identify the highlighted leaf used 13 logical tests to split the data.

Figure 6 shows the results visualization for RBF regression. One...

19/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2009 Thomson Reuters. All rts. reserv.
0013340979 - Drawing available
WPI ACC NO: 2003-428590/200340
XRPX Acc No: N2003-342104
Online business directory search result provision method, involves comparing search query with business category editorial nodes to determine matching node used to retrieve associated code-based business listings
Patent Assignee: MICROSOFT CORP (MICT)
Inventor: MARIANI R; MONBERG J C; STAAB S A
Patent Family (1 patents, 1 countries)
Patent Application
Number Kind Date Number Kind Date Update
US 6523021 B1 20030218 US 2000629275 A 20000731 200340 B

Priority Applications (no., kind, date): US 2000629275 A 20000731

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
US 6523021	B1	EN	24	6		

Alerting Abstract US B1

NOVELTY - A directory of business listings comprising a tree having leaf level editorial nodes with associated business category labels and industry standardized code-based business listings is provided. A search query related to a desired category is received and compared with editorial nodes to determine a matching node used to retrieve associated industry standardized code-based business listings.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.computer-readable medium storing business directory search results provision program; and
- 2.business directory search result provision system.

USE - For providing search result of business directory through Internet, wide area network (WAN) and local area network (LAN).

ADVANTAGE - Provides more relevant and useful search results to user in an efficient manner and allows the user to expend fewer resources to obtain desired directory listings.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of an illustrative data taxonomy for the categorization of listing data.

Title Terms/Index Terms/Additional Words: BUSINESS; DIRECTORY; SEARCH ; RESULT; PROVISION; METHOD; COMPARE; QUERY; CATEGORY; NODE; DETERMINE; MATCH; RETRIEVAL; ASSOCIATE; CODE; BASED

Class Codes

International Classification (Main): G06F-017/30

ECLA: G06F-017/30W1

US Classification, Issued: 7072, 70710, 707104.1

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B2B; T01-N01A2B; T01-N03A2; T01-S03

21/5/11 (Item 2 from file: 60)

DIALOG(R)File 60:ANTE: Abstracts in New Tech & Engineer

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0001568404 IP ACCESSION NO: 20081184541

Software testing system that employs a graphical interface to generate test cases configured as hybrid tree structures

Baer, William J; Leung, Paul C, USA

PUBLISHER URL:

<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netahtml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5414836.PN.&OS=pn/5414836&RS=PN/5414836>

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

FILE SEGMENT: ANTE: Abstracts in New Technologies and Engineering

ABSTRACT:

A data processing system enables a user to generate test cases that exercise a program under test. The data processing system includes a display, a keyboard input and memory for storing a library of node types including AND, OR, Decision and Content nodes, node linking data and a graphical user interface procedure. A central processor controls the display, input keyboard and memory and in response to user inputs, creates

a data base in memory that defines a hybrid tree structure that includes a plurality of node data structures. Each AND node data structure is connected by links to a plurality of child node data structures, each link to a child node data structure defining a sequence order value among all child node data structures linked to the AND node data structure. Each sequence order value defines a position in a sequence in which information is placed in the test case by traversal of the associated child node data structure. OR node data structures include an ability to set probabilities of visitation during traversal of a tree structure and Content node data structures enable definitions of a numerical set range and a probability that a randomly chosen value will be inside or outside the range. All AND, OR and Content node data structures have a looping attribute which defines how many times the node and its children will be revisited during execution of the tree structure. A Decision Node directs further traversal of the tree dependent upon the achievement of a condition statement.

DESCRIPTORS: Data structures; Trees; Keyboards; Data processing
; Graphical user interface; Databases; C (programming language);
Microprocessors; Computer programs; Software; Joining; Business
machines; Libraries; Children; Control equipment; Linking; Storage

II. Inventor Search Results from Dialog

Patent Files

File 371:French Patents 1961-2002/BOPI 200209
(c) 2002 INPI. All rts. reserv.
File 344:Chinese Patents Abs Jan 1985-2006/Jan
(c) 2006 European Patent Office
File 347:JAPIO Dec 1976-2009/Jul(Updated 091030)
(c) 2009 JPO & JAPIO
File 350:Derwent WPIX 1963-2009/UD=200973
(c) 2009 Thomson Reuters
File 349:PCT FULLTEXT 1979-2009/UB=20091112|UT=20091105
(c) 2009 WIPO/Thomson
File 348:EUROPEAN PATENTS 1978-200946
(c) 2009 European Patent Office

Set	Items	Description
S1	10	AU=(BONNEAU S? OR BONNEAU, S? OR BONNEAU (2N)(S OR SCOTT))
S2	10	AU=(NONEMACHER M? OR NONEMACHER, M? OR NONEMACHER (2N)(M - OR MICHAEL))
S3	8	AU=(WEINRIB J? OR WEINRIB, J? OR WEINRIB (2N)(J OR JEREMY-))
S4	2	S1 AND S2 AND S3
S5	23	S1 OR S2 OR S3
S6	5	S5 AND IC=(G06F-007/00 OR G06F-0007/00 OR G06F-017/30 OR G- 06F-0017/30 OR G06F-017/00 OR G06F-0017/00)
S7	5	S4 OR S6

7/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2009 Thomson Reuters. All rts. reserv.
0016866836 - Drawing available
WPI ACC NO: 2007-581897/200756
XRPX Acc No: N2007-448698

Messaging data processing method involves aggregating, consolidating, and
analyzing data from database and desired messaging statistics are derived
Patent Assignee: MESSAGEONE INC (MESS-N)
Inventor: GOLDFEIN J E; HOWITT M A; NONEMACHER M N
Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 7231403	B1	20070612	US 2002295427	A	20021115	200756 B

Priority Applications (no., kind, date): US 2002295427 A 20021115

Patent Details	Number	Kind	Lan	Pg	Dwg	Filing Notes
US 7231403	B1	EN	22	5		

Alerting Abstract US B1
NOVELTY - The method involves collecting data from messaging environment
system and transmitted to a management server. The received data is

inserted into the database. The data is processed to aggregate, consolidate, and analyze the data and desired messaging statistics are derived.

DESCRIPTION - An INDEPENDENT CLAIM is included for messaging data processing system.

USE - For maintaining communication between people such as employee of business entity or client and vendor.

ADVANTAGE - The data traffic is removed from the messaging environment such the impact of messaging system is reduced. The centralized administration of messaging environment is accommodated easily.

DESCRIPTION OF DRAWINGS - The figure shows a flow diagram explaining the messaging data processing method.

Title Terms/Index Terms/Additional Words: MESSAGING; DATA; PROCESS; METHOD; AGGREGATE; CONSOLIDATE; DATABASE; STATISTICAL; DERIVATIVE

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0015/16 A I L B 20060101

G06F-0017/00 A I F B 20060101

H04M-0001/24 A I L B 20060101

G06F-0015/16 C I B 20060101

G06F-0017/00 C I B 20060101

H04M-0001/24 C I B 20060101

ECLA: H04L-012/24, H04L-012/26M, H04L-012/58

ICO: T04L-012:26M5

US Classification, Current Main: 707-104100; Secondary: 379-001030, 709-201000

US Classification, Issued: 707104.1, 709201, 3791.03

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J03; T01-J05B4M; T01-N01A2; T01-N01D3

7/5/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0015846602 - Drawing available

WPI ACC NO: 2006-044003/200605

XRPX Acc No: N2006-037603

Custom catalog generating method for use in medical industry, involves generating output with pared subset of catalog data that forms intersection between query results and search results

Patent Assignee: TRILOGY DEV GROUP INC (TRIL-N)

Inventor: BONNEAU S; NONEMACHER M; WEINRIB J

Patent Family (1 patents, 1 countries)

Patent	Application					
Number	Kind	Date	Number	Kind	Date	Update
US 6978273	B1	20051220	US 2001884216	A	20010618	200605 B

Priority Applications (no., kind, date): US 2001884216 A 20010618

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
US 6978273	B1	EN	26	6		

Alerting Abstract US B1

NOVELTY - The method involves executing a search of a database for each of a set of rule sets in accordance with constraints specified by the rule sets, where the search returns a set of query results in the form of a subset of a catalog data having a scope defined by the constraints. An output with a pared subset of the catalog data that forms intersection between the query results and search results is generated.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.an apparatus comprising multiple computers for generating a set of custom catalogs from a database comprising catalog data
- 2.a computer program product for generating a set of custom catalogs from a database comprising catalog data.

USE - Used for generating custom catalog from a central catalog database that is utilized in computer hardware, software manufacturing and sales, professional service, financial service, automotive sales and manufacturing, telecommunications sales and manufacturing, medical and pharmaceutical sales and manufacturing and construction industries.

ADVANTAGE - The method generates customized versions of a custom catalog for each of an arbitrary number of different buyers such that the customized versions being results of rules-based searches of a central catalog database maintained by a seller.

DESCRIPTION OF DRAWINGS - The drawing shows a flowchart for a method of generating a custom catalog.

Title Terms/Index Terms/Additional Words: CUSTOM; CATALOGUE; GENERATE;
METHOD; MEDICAL; INDUSTRIAL; OUTPUT; PARING; SUBSET; DATA; FORM;
INTERSECT; QUERY; RESULT; SEARCH

Class Codes

International Classification (Main): G06F-017/30

ECLA: G06Q-030/00A

US Classification, Issued: 707102, 7073, 70710, 707101, 707103, 707104, 7076

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05A2C; T01-J05B3; T01-S03

7/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0015769262 - Drawing available

WPI ACC NO: 2006-330719/200634

XRPX Acc No: N2006-280305

Database access method for business process management system, involves converting initial query into modified query including pivots for accessing normalized tables

Patent Assignee: LOMBARDI SOFTWARE INC (LOMB-N)

Inventor: BONNEAU S; CHOBANTONOV P; CHOBANTONOVA D; GILBERT P;

HEREDIA D; MILES C; MOELLER M; MOFFAT A

Patent Family (1 patents, 1 countries)

Patent

Application

Number	Kind	Date	Number	Kind	Date	Update
US 20060095413	A1	20060504	US 2004568905	P	20040507	200634 B
			US 2005117761	A	20050426	

Priority Applications (no., kind, date): US 2004568905 P 20040507; US
2005117761 A 20050426

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20060095413	A1	EN	35	16	Related to Provisional US 2004568905

Alerting Abstract US A1

NOVELTY - An initial query directed to a de-normalized data table corresponding to multiple normalized tables in a relational database is converted into a modified query directed to normalized tables. The modified query includes pivots for accessing normalized tables like the de-normalized table. The execution results are reported after executing the modified query.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. database computing system; and
2. computer program product.

USE - For business process management system.

ADVANTAGE - Enables to access database effectively by converting initial query directed to de-normalized virtual table into query directed to normalized tables.

DESCRIPTION OF DRAWINGS - The figure shows the de-normalized table created based on the normalized table.

660 de-normalized table

Title Terms/Index Terms/Additional Words: DATABASE; ACCESS; METHOD;
BUSINESS; PROCESS; MANAGEMENT; SYSTEM; CONVERT; INITIAL; QUERY; MODIFIED;
PIVOT; NORMALISE; TABLE

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30 A I F B 20060101

G06F-0017/30 C I L B 20060101

ECLA: G06F-017/30S8R

US Classification, Current Main: 707-003000

US Classification, Issued: 7073

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B3; T01-S03

7/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0014715492 - Drawing available

WPI ACC NO: 2005-063109/200507

XRPX Acc No: N2005-054589

Hierarchy for representing items in seller's catalog database, includes multiple child nodes whose one portion specify constraints defining scope of subset of items and other portion specify no constraints

Patent Assignee: TRILOGY DEV GROUP INC (TRIL-N)

Inventor: BONNEAU S; NONEMACHER M; WEINRIB J

Patent Family (1 patents, 1 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update
US 6834282	B1	20041221	US 2001884180	A	20010618	200507 B

Priority Applications (no., kind, date): US 2001884180 A 20010618

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
US 6834282	B1	EN	11	3		

Alerting Abstract US B1

NOVELTY - The hierarchy includes a parent node from which multiple child nodes representing subset of items are branched. One portion of nodes specify the constraints defining scope of subset of items and other portion of nodes specify no constraints and establish a logical group defining scope of subset of items.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method of representing items in database hierarchically; and
- 2.method of browsing items stored in database.

USE - For representing items stored in seller's catalog database storing online catalogs and websites for facilitating e-commerce, e-procurement in internet, for computer hardware and software manufacturing and sales, professional services, financial services, automotive sales and manufacturing, telecommunication sales and manufacturing, medical and pharmaceutical sales and manufacturing, and construction industries.

ADVANTAGE - The seller establishes a set of rule base searches for each buyer or buyer organization simply.

DESCRIPTION OF DRAWINGS - The figure shows the schematic diagram of the hierarchy.

- 143,145,147,151 nodes
- 155 peripherals

Title Terms/Index Terms/Additional Words: HIERARCHY; REPRESENT; ITEM; CATALOGUE; DATABASE; MULTIPLE; CHILD; NODE; ONE; PORTION; SPECIFIED; CONSTRAIN; DEFINE; SCOPE; SUBSET; NO

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30	A	I	R	20060101
G06F-0007/00	A	I	R	20060101
G06F-0017/30	C	I	R	20060101
G06F-0007/00	C	I	R	20060101

ECLA: G06F-017/30G3

US Classification, Current Main: 707-100000; Secondary: 705-027000, 707-E17012, 715-853000

US Classification, Issued: 707100, 70527, 345853

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B2B; T01-N01A2A

7/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0013938304 - Drawing available

WPI ACC NO: 2004-118511/200412

XRPX Acc No: N2004-094689

Data maintenance method in construction industries, involves republishing data in database to update catalogs and pricing profiles based on changes made to database

Patent Assignee: TRILOGY DEV GROUP INC (TRIL-N)

Inventor: BONNEAU S; WEINRIE J

Patent Family (1 patents, 1 countries)

Patent

Application

Number	Kind	Date	Number	Kind	Date	Update
US 6678695	BI	20040113	US 2001895442	A	20010629	200412 B

Priority Applications (no., kind, date): US 2001895442 A 20010629

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6678695	BI	EN	63	8	

Alerting Abstract US BI

NOVELTY - A set of constraint-based rule sets are generated to identify the items in a database, and to define custom-catalogs that are subsets of the items and constraint-based pricing profiles. A custom catalog and a pricing profile are assigned to each organization. The data in the database is republished to update the catalogs and pricing profiles based on the changes made to the database.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. apparatus for maintaining data in database; and
2. computer program product for maintaining data in database

USE - For maintaining data in catalog database for use in computer hardware and software manufacturing and sales, professional services, financial services, automotive sales and manufacturing, telecommunication sales and manufacturing, medical and pharmaceutical sales and manufacturing, and construction industries.

ADVANTAGE - provides and maintains custom catalogs with custom pricing for its various buyers through centrally maintained single-source data, irrespective of whether the database, rule sets and the pricing profile are maintained over extranets or internally.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of apparatus for providing custom catalogs, custom pricing and customized browse hierarchies.

- 8 application server
- 9 database server
- 10 catalog database
- 16 web server
- 32 back-up server

Title Terms/Index Terms/Additional Words: DATA; MAINTAIN; METHOD;
CONSTRUCTION; INDUSTRIAL; DATABASE; UPDATE; CATALOGUE; PRICE; PROFILE;
BASED; CHANGE; MADE

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30 A I R 20060101

G06F-0017/30 C I R 20060101
US Classification, Issued: 707102
File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05B4M; T01-S03

NPL Files

File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
(c) 2002 Gale/Cengage
File 474:New York Times Abs 1969-2009/Nov 17
(c) 2009 The New York Times
File 475:Wall Street Journal Abs 1973-2009/Nov 17
(c) 2009 The New York Times
File 35:Dissertation Abs Online 1861-2009/Sep
(c) 2009 ProQuest Info&Learning
File 65:Inside Conferences 1993-2009/Nov 17
(c) 2009 BLDSC all rts. reserv.
File 99:Wilson Appl. Sci & Tech Abs 1983-2009/Oct
(c) 2009 The HW Wilson Co.
File 256:TecTrends 1982-2009/Nov W2
(c) 2009 Info.Sources Inc. All rights res.
File 2:INSPEC 1898-2009/Nov W2
(c) 2009 The IET
File 60:ANTE: Abstracts in New Tech & Engineer 1966-2009/Nov
(c) 2009 CSA.
File 56:Computer and Information Systems Abstracts 1966-2009/Nov
(c) 2009 CSA.
File 108:Aerospace and High Technology Database 1962-2009/Oct
(c) 2009 CSA.
File 8:EI Compendex(R) 1884-2009/Nov W1
(c) 2009 Elsevier Eng. Info. Inc.
File 6:NTIS 1964-2009/Nov W4
(c) 2009 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2009/Nov W3
(c) 2009 INIST/CNRS
File 95:TEME-Technology & Management 1989-2009/Oct W4
(c) 2009 FIZ TECHNIK
File 9:Business & Industry(R) Jul/1994-2009/Nov 16
(c) 2009 Gale/Cengage
File 16:Gale Group PROMT(R) 1990-2009/Oct 22
(c) 2009 Gale/Cengage
File 148:Gale Group Trade & Industry DB 1976-2009/Nov 16
(c) 2009 Gale/Cengage
File 160:Gale Group PROMT(R) 1972-1989
(c) 1999 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2009/Oct 16
(c) 2009 Gale/Cengage
File 621:Gale Group New Prod.Annou.(R) 1985-2009/Oct 08
(c) 2009 Gale/Cengage
File 636:Gale Group Newsletter DB(TM) 1987-2009/Oct 22
(c) 2009 Gale/Cengage
File 674:Computer News Fulltext 1989-2006/Sep W1
(c) 2006 IDG Communications
File 647:UBM Computer Fulltext 1988-2009/Nov W3

(c) 2009 UBM, LLC
 File 369:New Scientist 1994-2009/Nov W2
 (c) 2009 Reed Business Information Ltd.
 File 484:Periodical Abs Plustext 1986-2009/Nov 16
 (c) 2009 ProQuest
 File 47:Gale Group Magazine DB(TM) 1959-2009/Nov 03
 (c) 2009 Gale/Cengage
 File 634:San Jose Mercury Jun 1985-2009/Nov 13
 (c) 2009 San Jose Mercury News
 File 20:Dialog Global Reporter 1997-2009/Nov 17
 (c) 2009 Dialog
 File 15:ABI/Inform(R) 1971-2009/Nov 16
 (c) 2009 ProQuest Info&Learning
 File 624:McGraw-Hill Publications 1985-2009/Nov 17
 (c) 2009 McGraw-Hill Co. Inc

Set	Items	Description
S1	46	AU=(BONNEAU S? OR BONNEAU, S? OR BONNEAU (2N) (S OR SCOTT)) OR BY= BONNEAU(2N) (S OR SCOTT)
S2	1	AU=(NONEMACHER M? OR NONEMACHER, M? OR NONEMACHER(2N) (M OR MICHAEL OR MIKE)) OR BY= NONEMACHER(2N) (M OR MICHAEL OR MIKE)
S3	18	AU=(WEINRIB J? OR WEINRIB, J? OR WEINRIB (2N) (J OR JEREMY-)) OR BY= WEINRIB (2N) (J OR JEREMY)
S4	0	S1 AND S3
S5	65	S1 OR S2 OR S3
S6	9	S5 AND (HIERARCH? OR TREE? OR STRUCTURE?)
S7	7	RD (unique items)

No inventor matches in the NPL.

III. Text Search Results from Dialog

A. Patent Files, Abstract

File 371:French Patents 1961-2002/BOPI 200209

(c) 2002 INPI. All rts. reserv.

File 344:Chinese Patents Abs Jan 1985-2006/Jan

(c) 2006 European Patent Office

File 347:JAPIO Dec 1976-2009/Jul(Updated 091030)

(c) 2009 JPO & JAPIO

File 350:Derwent WPIX 1963-2009/UD=200973

(c) 2009 Thomson Reuters

Set	Items	Description
S1	774020	CATALOG? OR INVENTOR? OR REGISTER? OR LISTING?
S2	3130316	HIERARCH? OR TREE OR TREES OR STRUCTURE OR STRUCTURES
S3	94673	(S1 OR S2)(10N)(CUSTOM? OR PERSONALIZ? OR PERSONALIS? OR U- NIQUE OR INDIVIDUAL? OR TAILOR? OR ADAPT? OR MODIF?)
S4	6257	(NODE OR NODES)(5N)(LEAF OR ANCESTOR OR CHILD OR PARENT OR ROOT OR TOP OR BOTTOM)
S5	491657	RULE OR RULES OR INSTRUCTION OR INSTRUCTIONS OR STATEMENT - OR STATEMENTS
S6	30080	(CONSTRAINT OR CONSTRAINTS OR ITEM OR ITEMS)(10N)(SET OR S- ETS OR SUBSET OR SUBSETS OR SERIES OR AGGREGAT? OR COLLECT? OR GROUP?)
S7	132	S3 AND S4 AND S5
S8	69	S7 AND IC=(G06F-007/00 OR G06F-0007/00 OR G06F-017/30 OR G- 06F-0017/30 OR G06F-017/00 OR G06F-0017/00)
S9	96	S1 AND S2 AND S4 AND S5
S10	38	S9 AND IC=(G06F-007/00 OR G06F-0007/00 OR G06F-017/30 OR G- 06F-0017/30 OR G06F-017/00 OR G06F-0017/00)
S11	7	S9 AND S6
S12	51	S9 AND MC=(T01-J05B2B OR T01-N01A2A OR T01-J05A2C OR T01-J- 05B3 OR T01-S03)
S13	628119	BUSINESS OR COMMERCE OR ECOMMERCE OR B2B OR SALES OR SELL?
S14	15	S9 AND S13
S15	10	S7 AND S13
S16	29	S11 OR S14 OR S15
S17	14	S16 AND IC=(G06F-007/00 OR G06F-0007/00 OR G06F-017/30 OR - G06F-0017/30 OR G06F-017/00 OR G06F-0017/00)
S18	42	S10 OR S17
S19	12	S18 AND AY=1950:2001

19/5/1 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0015787590 - Drawing available

WPI ACC NO: 2004-675795/200466

Related WPI Acc No: 2000-137007; 2003-371023

XRPX Acc No: N2004-535551

Categorized event data display apparatus for use in commerce server system, classifies data records into several clusters, and performs multi-level hierarchical cluster organization based on similarity between each cluster pair

Patent Assignee: BRADLEY P S (BRAD-I); CHICKERING D M (CHIC-I); HECKERMAN D E (HECK-I); MEEK C A (MEEK-I); MICROSOFT CORP (MICT)
 Inventor: BRADLEY P S; CHICKERING D M; HECKERMAN D E; MEEK C A
 Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 20040181554	A1	20040916	US 1998104751	A	19980625	200466 B
			US 2001845151	A	20010430	
			US 2004808064	A	20040324	
US 7333998	B2	20080219	US 2004808064	A	20040324	200814 E

Priority Applications (no., kind, date): US 1998104751 A 19980625; US 2001845151 A 20010430; US 2004808064 A 20040324

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 20040181554	A1	EN	53	18	C-I-P of application US 1998104751 Continuation of application US 2001845151 C-I-P of patent US 6216134 Continuation of patent US 6742003

Alerting Abstract US A1

NOVELTY - A processor classifies the data records associated with the occurrence of corresponding events, into several clusters based on the attribute/value pairs associated with each record, in response to execution of stored instructions. The multi-level hierarchical cluster organization is performed and is displayed, based on similarity measure determined between each pair of clusters.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.categorized event data display method; and
- 2.recorded medium storing categorized event data display program.

USE - For hierarchically displaying categorized event data in commerce server system incorporating scalable processing infrastructure for accessing business-to-consumer and business-to-business electronic commerce web sites for providing user profiling, product cataloging and content management, transaction processing, targeted marketing and merchandising functionality and analysis of consumer buying activities.

ADVANTAGE - Allows data analyst to understand the similarity and dissimilarity between the categories, to interact with the category graph for obtaining further information related to categories, to control combining and splitting of categories, to focus on certain category and to de-emphasize a category.

DESCRIPTION OF DRAWINGS - DESCRIPTION OF DRAWING - The figure shows the schematic view of event data display.

Title Terms/Index Terms/Additional Words: EVENT; DATA; DISPLAY; APPARATUS; SERVE; SYSTEM; CLASSIFY; RECORD; CLUSTER; PERFORMANCE; MULTI; LEVEL; HIERARCHY; ORGANISE; BASED; SIMILAR; PAIR

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30 A I F B 20060101

G06F-0017/30 A I R 20060101

G06F-0017/30 C I F B 20060101
 G06F-0017/30 C I R 20060101
 ECLA: G06F-017/30S8R, G06F-017/30T4V
 US Classification, Current Main: 707-104100; Secondary: 707-E17092
 US Classification, Issued: 707104.1, 707101, 7076, 707104.1
 File Segment: EPI;
 DWPI Class: T01
 Manual Codes (EPI/S-X): T01-J05B3; T01-N01A2A; T01-S03

19/5/2 (Item 2 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
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 0014715492 - Drawing available
 WPI ACC NO: 2005-063109/200507
 XRPX Acc No: N2005-054589

Hierarchy for representing items in seller's catalog database, includes multiple child nodes whose one portion specify constraints defining scope of subset of items and other portion specify no constraints

Patent Assignee: TRILOGY DEV GROUP INC (TRIL-N)

Inventor: BONNEAU S; NONEMACHER M; WEINRIB J

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6834282	B1	20041221	US 2001884180	A	20010618	200507 B

Priority Applications (no., kind, date): US 2001884180 A 20010618

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6834282	B1	EN	11	3	

Alerting Abstract US B1

NOVELTY - The hierarchy includes a parent node from which multiple child nodes representing subset of items are branched. One portion of nodes specify the constraints defining scope of subset of items and other portion of nodes specify no constraints and establish a logical group defining scope of subset of items.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.method of representing items in database hierarchically; and
- 2.method of browsing items stored in database.

USE - For representing items stored in seller's catalog database storing online catalogs and websites for facilitating e-commerce, e-procurement in internet, for computer hardware and software manufacturing and sales, professional services, financial services, automotive sales and manufacturing, telecommunication sales and manufacturing, medical and pharmaceutical sales and manufacturing, and construction industries.

ADVANTAGE - The seller establishes a set of rule base searches for each buyer or buyer organization simply.

DESCRIPTION OF DRAWINGS - The figure shows the schematic diagram of the hierarchy.

- 143,145,147,151 nodes
- 155 peripherals

Title Terms/Index Terms/Additional Words: HIERARCHY; REPRESENT; ITEM;
CATALOGUE; DATABASE; MULTIPLE; CHILD; NODE; ONE; PORTION; SPECIFIED
; CONSTRAIN; DEFINE; SCOPE; SUBSET; NO

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30 A I R 20060101

G06F-0007/00 A I R 20060101

G06F-0017/30 C I R 20060101

G06F-0007/00 C I R 20060101

ECLA: G06F-017/30G3

US Classification, Current Main: 707-100000; Secondary: 705-027000,
707-E17012, 715-853000

US Classification, Issued: 707100, 70527, 345853

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B2B; T01-N01A2A

19/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0013340979 - Drawing available

WPI ACC NO: 2003-428590/200340

XRPX Acc No: N2003-342104

Online business directory search result provision method, involves
comparing search query with business category editorial nodes to
determine matching node used to retrieve associated code-based business listings

Patent Assignee: MICROSOFT CORP (MICT)

Inventor: MARIANI R; MONBERG J C; STAAB S A

Patent Family (1 patents, 1 countries)

Patent			Application				
Number	Kind	Date	Number	Kind	Date	Update	
US 6523021	B1	20030218	US 2000629275	A	20000731	200340	B

Priority Applications (no., kind, date): US 2000629275 A 20000731

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6523021	B1	EN	24	6	

Alerting Abstract US B1

NOVELTY - A directory of business listings comprising a
tree having leaf level editorial nodes with associated business category labels and
industry standardized code-based business listings is provided. A search query related
to a desired category is received and compared with editorial nodes to determine
a matching node used to retrieve associated industry standardized
code-based business listings.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- 1.computer-readable medium storing business directory search
results provision program; and
- 2.business directory search result provision system.

USE - For providing search result of business directory through
Internet, wide area network (WAN) and local area network (LAN).

ADVANTAGE - Provides more relevant and useful search results to user in an efficient manner and allows the user to expend fewer resources to obtain desired directory listings.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of an illustrative data taxonomy for the categorization of listing data.

Title Terms/Index Terms/Additional Words: BUSINESS; DIRECTORY; SEARCH
; RESULT; PROVISION; METHOD; COMPARE; QUERY; CATEGORY; NODE; DETERMINE;
MATCH; RETRIEVAL; ASSOCIATE; CODE; BASED

Class Codes

International Classification (Main): G06F-017/30

ECLA: G06F-017/30W1

US Classification, Issued: 7072, 70710, 707104.1

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B2B; T01-N01A2B; T01-N03A2; T01-S03

19/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0012461460 - Drawing available

WPI ACC NO: 2002-407535/200244

XRPX Acc No: N2002-320093

Payload correlation method for advertisement delivery system, involves evaluating catalog based on subset of client attribution corresponding to payload request

Patent Assignee: MICROSOFT CORP (MICT)

Inventor: THOMPSON D R; THOMPSON R D

Patent Family (4 patents, 27 countries)

Patent			Application			
Number	Kind	Date	Number	Kind	Date	Update
EP 1193942	A2	20020403	EP 2001123061	A	20010926	200244 B
US 20050203945	A1	20050915	US 2000672675	A	20000928	200561 E
			US 2005117807	A	20050429	
US 7206774	B1	20070417	US 2000672675	A	20000928	200728 E
US 7421423	B2	20080902	US 2000672675	A	20000928	200859 E
			US 2005117807	A	20050429	

Priority Applications (no., kind, date): US 2000672675 A 20000928; US 2005117807 A 20050429

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 1193942	A2	EN	22	14	

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 20050203945	A1	EN	Continuation of application	US	2000672675
US 7421423	B2	EN	Continuation of application	US	2000672675
			Continuation of patent	US	7206774

Alerting Abstract EP A2

NOVELTY - The condition statement of payload obtained corresponding to subset of client attributes are correlated into a catalog including attribute, evaluator, value, payload and conjunction lists. The catalog is evaluated based on the subset of client attribution, and

the payload is delivered.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. Recorded medium storing payload correlating program;
2. Communication medium

USE - For correlating payload in computer system for advertisement delivery system, and also for personal computer, server computers, laptop devices, multiprocessor systems, microprocessor-based systems, network PCs, mini computers, etc.

ADVANTAGE - The system facilitates the correlation of advertisement media payload to a specific subset of client attributes submitted by a content provider and therefore the catalog data, mitigates the need to evaluate the advertisement media without applying to the subset of client attributes.

DESCRIPTION OF DRAWINGS - The figure shows a block diagram of the advertisement delivery system.

Title Terms/Index Terms/Additional Words: PAYLOAD; CORRELATE; METHOD;
ADVERTISE; DELIVER; SYSTEM; EVALUATE; CATALOGUE; BASED; SUBSET;
CLIENT; CORRESPOND; REQUEST

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30	A	I	F	B	20060101
H04L-0029/06	A	I		R	20060101
H04L-0029/08	A	I		R	20060101
G06F-0017/30	C	I	F	B	20060101
G06F-0017/30	C	I		B	20060101
H04L-0029/06	C	I		R	20060101
H04L-0029/08	C	I		R	20060101

ECLA: H04L-029/08N27B

US Classification, Current Main: 707-002000, 707-102000; Secondary:

707-006000, 707-101000, 707-102000

US Classification, Issued: 707102, 7073, 7071, 7074, 7072, 7076, 707101, 707102

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-N01A2C; T01-S03

19/5/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0011099674 - Drawing available

WPI ACC NO: 2002-035461/200205

XRPX Acc No: N2002-027168

Method for efficient writing/description of hierarchical data-

structures e.g. for the Internet, requires listing of data

elements and subordinate nodes after the introductory node

Patent Assignee: MUESCHENBORN H (MUES-I); MUSCHENBORN H (MUSC-I)

Inventor: MUESCHENBORN H; MUSCHENBORN H

Patent Family (3 patents, 2 countries)

Patent Application

Number	Kind	Date	Number	Kind	Date	Update
DE 10129286	A1	20011031	DE 10129286	A	20010618	200205 B

DE 20114370	U1	20011129	DE 10129286	U	20010618	200205	E
			DE 20114370	U	20010618		
US 20030033314	A1	20030213	US 2002161748	A	20020605	200314	E

Priority Applications (no., kind, date): DE 10129286 A 20010618; DE 20114370 U 20010618

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
DE 10129286	A1	DE	23	2	
DE 20114370	U1	DE			Based on application DE 10129286

Alerting Abstract DE A1

NOVELTY - The method of platform-independent writing or describing of any hierarchically organized data-structure with at least one node-root overcomes the limitations of data-trees using platform-independent language in plain text, such as SGML, HTML etc for applications in heterogeneous networks e.g. the Internet.

DESCRIPTION - Each node can contain any number of data elements and any number (inclusive of 0) of sub-ordinate nodes. At least one node is introduced by the a maximum of one separate character (AK) of a specified alphabet (A), and at least one node after the said introductory character (AK) in any sequence lists the data elements and subordinate nodes contained in the said nodes.

USE - Platform-independent writing/description of any hierarchically organized data-structure, as well as parsers, generators and systems.

ADVANTAGE - Enables any hierarchically organized data structure with any type of data to be efficiently platform-independently described so that it can be easily, quickly and cost-favorably entered, stored and exchanged in a heterogeneous network, such as the Internet.

DESCRIPTION OF DRAWINGS - An EDL- document for representing a hierarchically organized data-structure is given. (Contains non-English language text).

Title Terms/Index Terms/Additional Words: METHOD; EFFICIENCY; WRITING; DESCRIBE; HIERARCHY; DATA; STRUCTURE; REQUIRE; LIST; ELEMENT; SUBORDINATE; NODE; AFTER; INTRODUCING

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30 A I R 20060101

G06F-0017/30 C I R 20060101

ECLA: G06F-017/30G, G06F-017/30W7S

US Classification, Current Main: 707-100000; Secondary: 707-E17118

US Classification, Issued: 707100

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05E; T01-N01D2; T01-N03B2; T01-S01B; T01-S01C

19/5/8 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0010812559 - Drawing available

WPI ACC NO: 2001-429317/200146

XRPX Acc No: N2001-318760

Structurized document search procedure involves generating search graph containing structure information on document and using index information, search plan showing search process procedure is generated

Patent Assignee: TOSHIBA KK (TOKE)

Inventor: HATTORI M; KANEWA T; NONOMURA K; KANAWA T

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
JP 2001147933	A	20010529	JP 1999330236	A	19991119	200146 B
JP 3754253	B2	20060308	JP 1999330236	A	19991119	200618 E
US 7054854	B1	20060530	US 2000714627	A	20001117	200636 E

Priority Applications (no., kind, date): JP 1999330236 A 19991119

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
JP 2001147933	A	JA	23	27	
JP 3754253	B2	JA	28		Previously issued patent JP 2001147933

Alerting Abstract JP A

NOVELTY - Based on search demand, search graph containing structure information is generated. Index information about actual data in structurized document database is used to generate search plan showing the search process procedure from search graph. By using structurizing document database, the search result satisfying the search demand is obtained.

DESCRIPTION - An INDEPENDENT CLAIM is also included for a structurized document search apparatus.

USE - Used for search of data in database.

ADVANTAGE - Search can be done without increasing the amount of calculation.

DESCRIPTION OF DRAWINGS - The figure shows the drawing explaining system assembly of structurizing document database system. (Drawing includes non-English language text).

Title Terms/Index Terms/Additional Words: DOCUMENT; SEARCH; PROCEDURE; GENERATE; GRAPH; CONTAIN; STRUCTURE; INFORMATION; INDEX; PLAN; PROCESS

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0012/00	A	I	L	B	20060101
G06F-0012/00	A	I	L	R	20060101
G06F-0017/21	A	I	F	R	20060101
G06F-0017/30	A	I	F	B	20060101
G06F-0017/30	A	I	L	B	20060101
G06F-0017/30	A	I	L	R	20060101
G06F-0007/00	A	I	F	B	20060101
G06F-0012/00	C	I	L	B	20060101
G06F-0012/00	C	I	L	R	20060101
G06F-0017/21	C	I	F	R	20060101
G06F-0017/30	C	I	L	B	20060101
G06F-0017/30	C	I	L	R	20060101
G06F-0007/00	C	I	L	B	20060101

ECLA: G06F-017/30X7P3

US Classification, Current Main: 707-003000; Secondary: 707-100000, 707-200000, 707-E17131

US Classification, Issued: 7073, 707100, 707200

JP Classification

FI Term	Facet Rank Type
G06F-012/00	547 Z
G06F-015/20	590 E
G06F-015/40	340
G06F-015/40	370 A
G06F-017/21	590 E
G06F-017/30	140
G06F-017/30	170 A
G06F-017/30	419 B

F-Term	View Point	Additional
Theme	+ Figure	Code
5B009		
5B075		
5B082		
5B109		
5B075	ND03	
5B075	ND35	
5B075	NK47	
5B009	VA02	

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B3

19/5/9 (Item 9 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0009255140 - Drawing available

WPI ACC NO: 1999-183017/199916

XREFX Acc No: N1999-134431

Hypertext editing system for world wide web content editing

Patent Assignee: INOUE K (INOUE-I); KAWAGUCHI K (KAWA-I); MATSUSHITA DENKI

SANGYO KK (MATU); MATSUSHITA ELECTRIC IND CO LTD (MATU); NAKANISHI Y

(NAKA-I); SAKUSHIMA K (SAKU-I)

Inventor: INOUE K; KAWAGUCHI K; NAKANISHI Y; SAKUSHIMA K

Patent Family (6 patents, 27 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 903677	A2	19990324	EP 1998307549	A	19980917	199916 B
JP 11096159	A	19990409	JP 1997256328	A	19970922	199925 E
CA 2245243	A1	19990322	CA 2245243	A	19980917	199936 E
US 20020010711	A1	20020124	US 1998156498	A	19980918	200210 E
EP 903677	B1	20021211	EP 1998307549	A	19980917	200282 E
DE 69810048	E	20030123	DE 69810048	A	19980917	200315 E
			EP 1998307549	A	19980917	

Priority Applications (no., kind, date): JP 1997256328 A 19970922; EP 1998307549 A 19980917

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 903677	A2	EN	36	26	

Regional Designated States,Original: AL AT BE CH CY DE DK ES FI FR GB GR
IE IT LI LT LU LV MC MK NL PT RO SE SI

JP 11096159 A JA 14

CA 2245243 A1 EN

EP 903677 B1 EN

Regional Designated States,Original: DE FR GB

DE 69810048 E DE Application EP 1998307549

Based on OPI patent EP 903677

Alerting Abstract EP A2

NOVELTY - The system includes a hierarchical control device for the hyperlink relationship information, where parent-children order is introduced to the hyperlink relationship between node data. A node group existing in a range is locked to exert influence when a specific node is edited from the control, and the influence range is determined by a lock object finder. The locking device acquires parent, offspring and ancestor node groups.

USE - For editing hypertext on the World Wide Web.

ADVANTAGE - System allows multiple users to edit hypertext documents associated with each other without causing contradictions.

Title Terms/Index Terms/Additional Words: EDIT; SYSTEM; WORLD; WIDE; WEB;
CONTENT

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0012/00 A I L R 20060101

G06F-0017/21 A I R 20060101

G06F-0017/22 A I R 20060101

G06F-0017/24 A I R 20060101

G06F-0017/30 A I L R 20060101

G06F-0012/00 C I L R 20060101

G06F-0017/21 C I R 20060101

G06F-0017/22 C I R 20060101

G06F-0017/24 C I R 20060101

G06F-0017/30 C I L R 20060101

ECLA: G06F-017/21F8, G06F-017/22, G06F-017/22L, G06F-017/22M, G06F-017/24

US Classification, Current Main: 715-205000

US Classification, Issued: 707501.1

JP Classification

FI Term Facet Rank Type

G06F-012/00 535 Z

G06F-012/00 547 H

G06F-015/20 550 E

G06F-015/20 554 N

G06F-015/40 370 A

G06F-015/401 340 A

G06F-015/419 320

G06F-017/21 501 Z

G06F-017/24 554 N

G06F-017/30 170 A

G06F-017/30 240 A

G06F-017/30 419 B

F-Term View Point Additional

Theme + Figure Code

5B009		5B009	NC02
5B075		5B009	NE03
5B082		5B009	QB06
5B109		5B009	QB11
5B082	FA17	5B075	UU05
5B082	GA14	5B075	UU40
5B009	NA05	5B009	VC01
5B009	NB00		

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B2B; T01-J11A; T01-J11C1

19/5/10 (Item 10 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
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 0008567250 - Drawing available
 WPI ACC NO: 1998-101244/199809
 Query processing method for database - using index types that are not built into database, and generating routines for managing index structure that are not supported by database system
 Patent Assignee: ORACLE CORP (ORAC)
 Inventor: BANERJEE J; DAS S; DEFAZIO S; FAZIO S D; FREIWALD C; HONG C; MURTHY R; NORI A; SRINIVASAN J
 Patent Family (6 patents, 76 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1998001811	A2	19980115	WO 1997US11194	A	19970701	199809 B
AU 199738791	A	19980202	AU 199738791	A	19970701	199826 E
US 5893104	A	19990406	US 1996677159	A	19960709	199921 E
EP 912950	A2	19990506	EP 1997936022	A	19970701	199922 E
			WO 1997US11194	A	19970701	
US 6128610	A	20001003	US 1996677159	A	19960709	200050 E
			US 1998139526	A	19980825	
CA 2259544	C	20040120	CA 2259544	A	19970701	200411 E
			WO 1997US11194	A	19970701	

 Priority Applications (no., kind, date): US 1996677159 A 19960709; US 1998139526 A 19980825

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
WO 1998001811	A2	EN	32	2		
National Designated States,Original: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN YU						
Regional Designated States,Original: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW						
AU 199738791	A	EN			Based on OPI patent	WO 1998001811
EP 912950	A2	EN			PCT Application	WO 1997US11194
					Based on OPI patent	WO 1998001811
Regional Designated States,Original: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT RO SE SI						
US 6128610	A	EN			Division of application	US 1996677159

CA 2259544

C EN

Division of patent US 5893104

PCT Application WO 1997US11194

Based on OPI patent WO 1998001811

Alerting Abstract WO A2

The database query processing method involves generating routines for managing an index structure that is not supported by a database system, and submitting to the database system data that identifies the routines.

In response to statements issued to the database system by the client, the database calls the routines, and the routines perform the steps of creating the index structure using data from a data container in the database, and generating data that indicates which data in the data container satisfies a query issued by the client.

USE - Processing query in database system by supporting

USE - non-native access methods in database server.

Title Terms/Index Terms/Additional Words: QUERY; PROCESS; METHOD; DATABASE; INDEX; TYPE; BUILD; GENERATE; ROUTINE; MANAGE; STRUCTURE; SUPPORT; SYSTEM

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30 A I R 20060101

G06F-0017/30 C I R 20060101

ECLA: G06F-017/30S2P

US Classification, Current Main: 707-003000; Secondary: 707-100000

US Classification, Issued: 7072, 7073, 707103, 707102, 707100, 7073

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B1; T01-J05B3

19/5/11 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0006202924 - Drawing available

WPI ACC NO: 1992-277722/199234

XRPX Acc No: N1992-212408

Vector merge and sort for vector processor - using multiple vector count and interruption index operation, in which string length and merge masks are used in conjunction with vector merge instruction

Patent Assignee: IBM CORP (IBM); INT BUSINESS MACHINES CORP (IBM)

Inventor: CARCIA L C; GARCIA L C; LINDQUIST D B; ROLLO G F

Patent Family (3 patents, 1 countries)

Patent		Application				
Number	Kind	Date	Number	Kind	Date	Update
EP 481248	A	19920422	EP 1991116181	A	19910924	199234 B
US 5287494	A	19940215	US 1990599609	A	19901018	199407 E
EP 481248	A3	19930728	EP 1991116181	A	19910924	199507 E

Priority Applications (no., kind, date): US 1990599609 A 19901018

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 481248	A	EN	21	14	
US 5287494	A	EN	19	14	
EP 481248	A3	EN			

Alerting Abstract EP A

A tree unit stores a number of keys in a tournament tree structure. A resolution unit resolves the tournament tree to determine a tournament champion in a single comparison cycle. An update unit, coupled to the store and resolution unit, update the tree unit with data for a next comparison cycle. Data stream units are coupled to the tournament tree structure to feed an ordered list comprising a subset of the keys to the tree structure.

The structure comprises a number of storage devices, comprising key storage storing key data indicative of one of the keys and address storage to store source identification data indicative of one of the data streams, from which one of the keys originated.

ADVANTAGE - Storage to storage traffic is drastically reduced because the hardware tree and update logic is implemented in the vector processor.

Equivalent Alerting Abstract US A

The tree sorter has hardware logic node registers and output selectors with comparators and enables a vector processor to perform sort and merge operations. One output record is provided in each cycle. Vector registers provide input data to the hardware tree structure. Output records sorted by key together with address ID are placed in storage.

Multiple Vector count and multiple Vector Interruption Index (VIX) operation, string length and merge masks are used in conjunction with a vector merge instruction. The data input record key field has both long and short formats. Actual key data or codewords may be used. The vector merge forms a new codeword when compare equal codewords are encountered. By storing sorted keys (codewords) plus the address ID, reuse of codewords (in formation of longer strings, etc.) is made possible.

ADVANTAGE - Enhancement performance scalar operation. Storage to storage traffic is drastically reduced as hardware tree and update logic are implemented in Vector Processor.

Title Terms/Index Terms/Additional Words: VECTOR; MERGE; SORT; PROCESSOR; MULTIPLE; COUNT; INTERRUPT; INDEX; OPERATE; STRING; LENGTH; MASK; CONJUNCTION; INSTRUCTION

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0015/78 A I R 20060101

G06F-0017/30 A I R 20060101

G06F-0007/24 A I R 20060101

G06F-0007/36 A I R 20060101

G06F-0015/76 C I R 20060101

G06F-0017/30 C I R 20060101

G06F-0007/22 C I R 20060101

ECLA: G06F-007/24, G06F-007/36, G06F-015/78V, G06F-017/30G3

US Classification, Current Main: 707-007000; Secondary: 340-825020, 707-E17012

US Classification, Issued: 340825.02, 364282.1, 364229.41, 364DIG.001, 364974, 364DIG.002, 395600

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-E01A; T01-E01C; T01-J05B4

19/5/12 (Item 12 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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0003881258

WPI ACC NO: 1986-340831/198652

Tree-search appts. for locating execution-ready instruction -uses tree structure where each node represents one of items which satisfies predetermined criterion

Patent Assignee: INT COMPUTERS LTD (INCM)

Inventor: HOLT N P

Patent Family (8 patents, 8 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 206504	A	19861230	EP 1986303706	A	19860515	198652 B
GB 2176919	A	19870107	GB 198515482	A	19850619	198701 E
			GB 19869856	A	19860423	
AU 198658823	A	19861224				198706 E
ZA 198603960	A	19870106				198712 E
US 4751684	A	19880614	US 1986864428	A	19860519	198826 E
GB 2176919	B	19890712	GB 198515482	A	19850619	198928 E
			GB 19869856	A	19860423	
EP 206504	B1	19930630	EP 1986303706	A	19860515	199326 E
DE 3688640	G	19930805	DE 3688640	A	19860515	199332 E
			EP 1986303706	A	19860515	

Priority Applications (no., kind, date): GB 198515482 A 19850619; GB 19869856 A 19860423

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
EP 206504	A	EN	15	3		
Regional Designated States,Original: BE DE FR GB IT NL						
ZA 198603960	A	EN				
EP 206504	B1	EN	8	3		
Regional Designated States,Original: BE DE FR GB IT NL						
DE 3688640	G	DE			Application	EP 1986303706
					Based on OPI patent	EP 206504

Alerting Abstract EP A

In the search apparatus each terminal node of the tree structure is set if the item represented satisfies a predetermined criterion (instruction ready for execution, or free block of data in a cellular array). A non-terminal node is set if any of its subordinate nodes is set. The tree is stored in random-access memory (20) contg. one bit for every node except the root node, and addressed by the five least significant bits from an 8-bit address register (21).

Data output is fed to a four-bit register (23) and priority encoder (24) representing the first set bit. A control register (25) controls data input to the random-access memory (20) via selection logic (26).

USE/ADVANTAGE - Parallel processing system. Search accelerated without recourse to expensive associative memory.

Equivalent Alerting Abstract US A

The search apparatus comprises a device for maintaining a representation of a tree structure comprising a number of interconnected nodes including a root node and a number of terminal nodes, each node being set to a predetermined state if any one of its

subordinate nodes is set in a predetermined state. A path is followed through the **tree**, starting from the **root node** and passing through a series of nodes all of which are set in their predetermined states until a terminal node in its predetermined state is reached.

The maintaining device comprises a random-access memory having a number of individually addressable locations each of which holds a number of bits, each node of the **tree** other than the **root node** being represented by one of the bits. Each location in the random-access memory contains b bits, and a node represented by bit y of locations x of the memory has b subordinate nodes represented by the b bits in location bx + y of the memory. (6pp)t

Title Terms/Index Terms/Additional Words: **TREE**; **SEARCH**; **APPARATUS**;
LOCATE; **EXECUTE**; **READY**; **INSTRUCTION**; **STRUCTURE**; **NODE**;
REPRESENT; **ONE**; **ITEM**; **SATISFY**; **PREDETERMINED**; **CRITERIA**

Class Codes

International Classification (Main): G06F-009/44

(Additional/Secondary): G06F-015/40

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0017/30 A I R 20060101

G06F-0009/44 A I R 20060101

G06F-0017/30 C I R 20060101

G06F-0009/44 C I R 20060101

ECLA: G06F-009/44D, G06F-017/30G3

US Classification, Current Main: 365-231000; Secondary: 340-825020,
 365-189070, 365-230060, 370-256000, 370-408000, 707-001000, 707-E17012

US Classification, Issued: 365231, 340825.02, 364DIG.001, 365189.07,
 365230.06, 37054, 395600

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F09

B. Patent Files, Full-Text

File 349:PCT FULLTEXT 1979-2009/UB=20091112|UT=20091105

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File 348:EUROPEAN PATENTS 1978-200946

(c) 2009 European Patent Office

Set	Items	Description
S1	684545	CATALOG? OR INVENTOR? OR REGISTER? OR LISTING?
S2	1374226	HIERARCH? OR TREE OR TREES OR STRUCTURE OR STRUCTURES
S3	213884	(S1 OR S2) (10N) (CUSTOM? OR PERSONALIZ? OR PERSONALIS? OR U- NIQUE OR INDIVIDUAL? OR TAILOR? OR ADAPT? OR MODIF?)
S4	10353	(NODE OR NODES) (5N) (LEAF OR ANCESTOR OR CHILD OR PARENT OR ROOT OR TOP OR BOTTOM)
S5	524337	RULE OR RULES OR INSTRUCTION OR INSTRUCTIONS OR STATEMENT - OR STATEMENTS
S6	42792	(CONSTRAINT OR CONSTRAINTS OR ITEM OR ITEMS) (10N) (SET OR S- ETS OR SUBSET OR SUBSETS OR SERIES OR AGGREGAT? OR COLLECT? OR GROUP?)
S7	153	S3(S) S4(S) S5

S8 36 S7 AND IC=(G06F-007/00 OR G06F-0007/00 OR G06F-017/30 OR G-
06F-0017/30 OR G06F-017/00 OR G06F-0017/00)
S9 79 S1(S)S2(S)S4(S)S5
S10 19 S9 AND IC=(G06F-007/00 OR G06F-0007/00 OR G06F-017/30 OR G-
06F-0017/30 OR G06F-017/00 OR G06F-0017/00)
S11 6 S10 AND AY=1950:2001

11/3,K/1 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00885149 **Image available**

INTENTION-BASED AUTOMATED CONFLICT PREDICTION AND NOTIFICATION SYSTEM
SYSTEME AUTOMATISE DE PREDICTION ET DE NOTIFICATION DE CONFLITS A BASE
D'INTENTION

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200219290 A2-A3 20020307 (WO 0219290)

Application: WO 2001US23728 20010725 (PCT/WO US0123728)

Priority Application: US 2000221231 20000725

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 7473

International Patent Class (v7): G06F-017/30

Fulltext Availability:

Detailed Description

Claims

Claim

...the art will appreciate that the language converter 144 includes a
defined vocabulary, such as verbs, adverbs, and adjectives that enables
conversion of natural language statements to a spatial-temporal
format. Similarly, converting "Establish AO FOX" to spatial temporal
format produces "create (AO[AO FOX])". This indicates that an area of
operations (AD) will be created that is named AO FOX. Combining the
statements produces "At [Start [6, At [1/6/1999 Future [6, attack
(BP [BP103]]]] create (AO [AO FOX])]." The structure of this
statement enables efficient reading to mean that an attack will

take place on 1/6/1999. at 0800 on battle position BP 103, which will create...

...objects, it notifies the database interface 520 and the logic system 515 of the new information. The logic system 515 uses a set of predefined rules, such as military doctrine, to determine if the attributes of any of these data messages violate any rules. For example when an instruction is received to initiate an attack, the logic system determines whether the commander has followed the proper military procedures based on the predefined rules. The database interface 520 communicates with and constantly scans the database management system 146 for new information from other systems and passes this new information...nodes and/or with the nodes representing other things such as medication type, medication dosage, pre-existing conditions, and patient history in medical applications, and inventory, production scheduling, employee availability, and vehicle location in a management system applications. In addition to navigational nodes, the preferences panel 620 includes navigational buttons 622...

...between spherical navigation and linear navigation. Other buttons could include an areas (A) button that allow quick navigation to the areas node of the preferences tree. Similarly, a relationship button (R), fragmentary order button (F), and units button (U) enable efficient navigation to their respective portions of the preferences tree. The preferences panel 620 also includes navigational clues that provide a quick-reference for users. For example, the preferences panel 620 lists the immediate parent of the current node next to the label Parent and lists the main branch of the preferences under display. Turning now to FIG. 613, it depicts two Windows®-based screens generated by the user...

11/3,K/2 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00805437 **Image available**

APPARATUSES, METHODS, AND PROGRAMMING FOR AUTOMATICALLY LAYING OUT DOCUMENTS

APPAREILS, PROCEDES ET PROGRAMMATION DESTINES A LA MISE EN PAGE AUTOMATIQUE DE DOCUMENTS

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200139019 A2 20010531 (WO 0139019)

Application: WO 2000US32195 20001122 (PCT/WO US00032195)

Priority Application: US 99449688 19991124

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT

LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM

TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 54381

Main International Patent Class (v7): G06F-017/30

Fulltext Availability:

Detailed Description

Claims

Claim

```
... allows user to pick attributes for, and select to
create, a new template~1044
-if user selects to create a new template~1046
-create a tree data structure comprised of a document root
node, and one
page node under it~1048
-create a default TSL style sheet~1 050
-display template in document window~1 052
-display tree in structure view~1 054
'FIGS 60
-fileSave~1056
-display File Save dialog box which allows a user to edit the name of,
select a file directory...
...058
-if user selects to save template under a given name at a given
directory~1 060
-create an xml representation of the template's tree data
structure~1062
-save xml representation in a template file with the given name and a xdt
file extension in the given directory~1064
-saves corresponding style...
...65
-propertiesEditor (selection)~1 126
-dispay Properties editor dialog box with currently selected tab shown,
displaying for the currently selected tab two columns, the first
listing attributes of the selection and the second a user-editable
field listing the current value of that
attribute for the currently selection~1 128
-if use selects to display other of two tabs~1 130 -display that...
```

11/3,K/3 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00801757 **Image available**

A DECISION BASED SYSTEM FOR MANAGING DISTRIBUTED RESOURCES AND MODELING THE
GLOBAL OPTIMIZATION PROBLEM

SYSTEME DECISIONNEL DE GESTION DE RESSOURCES DISTRIBUEES ET DE MODELISATION
D'UN PROBLEME D'OPTIMISATION GLOBALE

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200135278 A1 20010517 (WO 0135278)

Application: WO 2000US30913 20001110 (PCT/WO US0030913)

Priority Application: US 99164527 19991110; US 2000197036 20000413

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT

LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM

TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 23454

Main International Patent Class (v7): G06F-017/30

Fulltext Availability:

Detailed Description

Claims

Claim

... time intervals, the effects of newer events get 1 5 reflected in the

global solutions computed subsequently. Because of the nature of the problem, simple rule-based heuristics can be used to make local optimization decisions prior to invoking the Optimizer. Such preprocessing can significantly reduce the turnaround time in responding ...optimization problem to the Optimizer. A somewhat advanced, but optional treatment of the Preprocessor is to partially evaluate an event using a basic set, of rules so as to reduce the amount of processing done by the Optimizer. In general, this can lead to globally non-optimal solutions, but in many instances simple rules can be constructed and embedded in the Pre processor so as to keep the solutions globally optimal while
 p
 reducing the load on the Optimizer...

...wherein the sampling of data from repository objects of the island into their partial copies effectively combines the effect of all events that have been registered (updated) in the repository. When the preprocessor picks an up/down event for processing, it marks all resource objects in the island affected by the...and soft dependencies is straightforward. Gossamers are of two kinds - onlining and offlining. Onlining gossamers bring resources up and offlining gossamers bring resources down. The structure of onlining and offlining gossamers is symmetric: each has a single root node. Onlining commands are executed in a bottom-up manner by a gossamer, and 5 offlining commands are executed in a top-down manner by a...

11/3,K/4 (Item 4 from file: 349)
 DIALOG(R)File 349:PCT FULLTEXT
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 00764264 **Image available**
 SYSTEM AND METHOD FOR DOCUMENT MANAGEMENT BASED ON A PLURALITY OF KNOWLEDGE TAXONOMIES
 SYSTEME ET PROCEDE DE GESTION DE DOCUMENTS BASES SUR PLUSIEURS TAXONOMIES DES CONNAISSANCES
 Patent Applicant/Assignee:
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 (Residence), US (Nationality)
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 PETERS Stanley, 128 Hillside Avenue, Menlo Park, CA 94025, US
 PRUETT Rodney, 772 Coronado Lane, Foster City, CA 94404, US
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 Patent and Priority Information (Country, Number, Date):
 Patent: WO 200077690 A1 20001221 (WO 0077690)
 Application: WO 2000US16444 20000615 (PCT/WO US0016444)
 Priority Application: US 99139509 19990615

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR
TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 31064

Main International Patent Class (v7): G06F-017/30

Fulltext Availability:

Detailed Description

Claims

Claim

... For example, using a lexical taxonomy of companies organized hierarchically by industry type, in conjunction with a topic taxonomy of legal issues, a user could ask the system to: "Show documents which (a) mention software...at or near the topic of "intellectual property protection" in the legal issues topic taxonomy. As shown in FIG. 4, taxonomy 30 may comprise a tree (a hierarchical directed acyclic graph) or a DAG (directed acyclic graph) structure. Briefly, a directed acyclic graph is a graph in which edges have a direction (an edge from node A to node B is different from...
...next, it is possible to return to a node previously visited). A node in a DAG may have multiple parents, but a node in a tree has at most one parent. In some embodiments only trees are allowed, meaning that all concept nodes have one and only one parent. In other embodiments DAG's are allowed, meaning that concept nodes can have multiple parents. Semantically, concept nodes in each taxonomy represent classifications in a...
...a company's complete product line, and another might represent geography--different parts of the world. A general but not universal implication of one concept node being a child of another is that the parent represents a more general classification and the child a more specific sub-classification. Using vehicles as an example, a...
...may be used. Taxonomic distance is the distance between concept nodes as defined by such a function. One such function weights the distance from a parent concept node to its child differently from the distance from the child to the parent. The motivation for this can be seen by an example: suppose the system has identified...
...and dictionary lookup techniques known in the art. In one embodiment, they are marked within the content using XML-based markers. 15 Similarly to content structure markup, the invention in its broadest aspect is not limited to any particular technique for identification or markup of technical terms. Next, in step 530...simultaneously improving the

quality of operation. The input into the knowledge map generation mechanism is a set of documents and a set of "target" taxonomy root nodes. The output is a knowledge map. A set of steps and algorithms that translate the former into the latter is described below. The starting point...

...document format and type. The second input into the process (step 904) is a set of taxonomy root conceptnodes. One taxonomy is generated for each root node. A root concept-node is essentially the "name" of a taxonomy, and identifies the perspective on or facet of the 10 knowledge domain covered by the taxonomy. Each root concept-node is the starting point for manufacturing a taxonomy, which is essentially an orthogonal view of the knowledge contained in the corpus. While the number of root concept-nodes is not limited, the set of root concept-nodes must meet three tests in order to be a valid input. First, the concept-nodes do not overlap. Second, the concept-nodes are relevant. 15 Third, the concept-nodes are orthogonal. The purpose of each root concept-node is to be the seed for growing a full taxonomy. Therefore, the root nodes should not "overlap". Each root concept-node should generally be the basis for a discrete perspective on the underlying knowledge to be represented in the knowledge map. Overlap occurs when two root nodes are provided that are actually identical or nearly 20 identical. In effect, the root concept-nodes are synonyms, and taxonomies generated from them would cover substantially the same portion and aspect of the knowledge domain. For example, the root nodes "Geography - The World" and "Nationality" may, for a given knowledge domain, turn out to be overlapping concepts. If all or most of the terms ascribed to two taxonomies overlap (i.e., they are ambiguous terms), then the taxonomies are non-discrete and are preferably combined into a single root node. If overlap is found, the input set of concept-nodes should be fixed and the knowledge map generation process re-initiated. Each root concept-node is a valid 5 foundation for a view of knowledge actually contained in the corpus. Irrelevance occurs when a root concept node has no relationship to the content. For example, the concept-node "Geography - The World" would be irrelevant to a corpus that does not deal with "place" in any respect (combinatorial chemistry, for example). If few or no terms are ascribed to a particular root, then that root concept-node is probably not 10 relevant. The cure is to eliminate the concept-node from the input set and to re-initiate the knowledge map generation...

11/3,K/5 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00411351
EXTENSIBLE INDEXING
INDEXAGE EXTENSIBLE
Patent Applicant/Assignee:
ORACLE CORPORATION,
Inventor(s):
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MURTHY Ravi,
HONG Chin,
DEFAZIO Samuel,

NORI Anil,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9801811 A2 19980115
Application: WO 97US11194 19970701 (PCT/WO US9711194)
Priority Application: US 96677159 19960709
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU
IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL
PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN YU GH KE LS MW SD SZ UG
ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC
NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 7585
Main International Patent Class (v7): G06F-017/30

English Abstract

...processing a query in a database system using index types that are not built into the database system are disclosed. Routines for managing an index **structure** that is not supported by a database system are generated. Data that identify the routines are submitted to the database system, thereby "**registering**" the index types with the database system. In response to **statements** issued to the database system by a client, the database system call the routines, causing the routines to create an index **structure** using data from a data container in the database, and to generate data that indicates which data in the data container satisfies a query issued by the client. The routines of the **registered** index type extend the indexing capabilities of the database systems and one or more such index types can be **registered** with the database system. The index **structure** managed by the routines may be maintained within segments of the database, and the segments may be accessed as index-only tables. Storing a row of data in a database using index-only tables involves storing in a **leaf node** an index entry that includes a key value along with all other values in the row of data. If the row of data exceeds a...

11/3,K/6 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00376923
STRUCTURED FOCUSED HYPERTEXT DATA STRUCTURE
STRUCTURE DE DONNEES HYPERTEXTE ARTICULEE SUR LA STRUCTURATION
Patent Applicant/Assignee:
HYPERMED LTD,
OREN Avraham,
OLCHA Lev,
KOWALSKI Nahum,
MARGULYAN Rita,
Inventor(s):
OREN Avraham,
OLCHA Lev,
KOWALSKI Nahum,
MARGULYAN Rita,
Patent and Priority Information (Country, Number, Date):

Patent: WO 9717666 A2 19970515
Application: WO 96IL131 19961023 (PCT/WO IL9600131)
Priority Application: US 95551929 19951023

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE
KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE
SG SI SK TJ TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD
RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 263802

Main International Patent Class (v7): G06F-017/30

Fulltext Availability:

Detailed Description

Detailed Description

... tests, and procedures) and each of these types may be further broken down into subtypes. These types and subtypes may be useful in designing a hierarchical database. However, certain medical knowledge may be accurately categorized in many ways. For example, celiac disease may be categorized as both a digestive disorder and...

...may otherwise disagree on how to categorize many parts of medical knowledge.

4

SUBSTITUTE SHEET (RULE 26)

Thus, the usefulness of such categorizations in a hierarchical database is severely limited. Applicant(s) are unaware of any existing medical or other type of large database which uses categorizations but accounts for...SCREEN-OFF)

LocationInList = WasAPreviousScreen = False

TOCFull.IstChapters.ListCount EndIf

EndIf

141

SUBSTITUTE SHEET (RULE 26)

If WasANextScreen <> IsANextScreen If NumScInList = 0 Then

Then ReDirn SCEnv-HierarchicalList(I To

If IsANextScreen Then 3, 1 To 1)

frmMain.NextScreen.Picture Else

LoadPicture(KevImagePath & ReDirn SCEnv HierarchicalList(I To

IV. Text Search Results from Dialog

A. NPL Files, Abstract

File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
(c) 2002 Gale/Cengage
File 474:New York Times Abs 1969-2009/Nov 17
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File 475:Wall Street Journal Abs 1973-2009/Nov 17
(c) 2009 The New York Times
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File 2:INSPEC 1898-2009/Nov W2
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File 60:ANTE: Abstracts in New Tech & Engineer 1966-2009/Nov
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File 144:Pascal 1973-2009/Nov W3
(c) 2009 INIST/CNRS
File 95:TEME-Technology & Management 1989-2009/Oct W4
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Set	Items	Description
S1	721511	CATALOG? OR INVENTOR? OR REGISTER? OR LISTING?
S2	7730428	HIERARCH? OR TREE OR TREES OR STRUCTURE OR STRUCTURES
S3	305734	(S1 OR S2)(10N)(CUSTOM? OR PERSONALIZ? OR PERSONALIS? OR U- NIQUE OR INDIVIDUAL? OR TAILOR? OR ADAPT? OR MODIF?)
S4	7168	(NODE OR NODES)(5N)(LEAF OR ANCESTOR OR CHILD OR PARENT OR ROOT OR TOP OR BOTTOM)
S5	1238041	RULE OR RULES OR INSTRUCTION OR INSTRUCTIONS OR STATEMENT - OR STATEMENTS
S6	85398	(CONSTRAINT OR CONSTRAINTS OR ITEM OR ITEMS)(10N)(SET OR S- ETS OR SUBSET OR SUBSETS OR SERIES OR AGGREGAT? OR COLLECT? OR GROUP?)
S7	4	S1 AND S2 AND S4 AND S5
S8	18	S3 AND S4 AND S5
S9	280	S2 AND S4 AND S5
S10	4896	S2 AND S5 AND (NODE OR NODES)
S11	89	S10 AND S1
S12	3	S11 AND S6

S13 2078234 BUSINESS OR COMMERCE OR ECOMMERCE OR B2B OR SALES OR SELL?
 S14 88 S10 AND S13
 S15 7 S9 AND S13
 S16 3 S11 AND S13
 S17 762 S10 AND (SEARCH? OR QUER?)
 S18 15 S17 AND S13
 S19 50 S7 OR S8 OR S12 OR S15 OR S16 OR S18
 S20 26 S19 NOT (PY>2001 OR PD>20010618)
 S21 16 RD (unique items)

21/5/1 (Item 1 from file: 35)
 DIALOG(R)File 35:Dissertation Abs Online
 (c) 2009 ProQuest Info&Learning. All rts. reserv.
 01602865 ORDER NO: AAD98-06975
 MINIMIZING INPUT ACQUISITION COSTS IN A BAYESIAN BELIEF NETWORK-BASED
 EXPERT SYSTEM (DECOMPOSABLE NETWORKS)
 Author: GILSON, ROBERT
 Degree: PH.D.
 Year: 1997
 Corporate Source/Institution: UNIVERSITY OF WASHINGTON (0250)
 Chairperson: MICHAEL V. MANNINO
 Source: VOLUME 58/08-A OF DISSERTATION ABSTRACTS INTERNATIONAL.
 PAGE 3206. 149 PAGES
 Descriptors: BUSINESS ADMINISTRATION, MANAGEMENT ; COMPUTER
 SCIENCE ; ARTIFICIAL INTELLIGENCE
 Descriptor Codes: 0454; 0984; 0800

Sequential decision models (SDM) are an important element of expert system optimization when the cost or time to collect inputs is significant and inputs are not known until the system operates. Bayesian belief networks are difficult to use for SDM because they are non-monotonic; any input may revise belief levels up or down. This dissertation examines only the problem of minimizing the cost of collecting information in order to make a decision. New methods are presented for overcoming Bayesian non-monotonicity in certain types of network **structures**, decomposable networks.

Decomposable networks possess exploitable characteristics that can be used to overcome non-monotonicity. Conditional independence among inputs in decomposable networks leads to an efficient algorithm for incremental computation of bounds on the belief level of the **query**. Directed paths from the **query** to every input allow independent assessment of the impact each input has on the goal. Bounds are subsequently used to develop a stopping condition for **queries** characterized by a finite set of discrete, mutually exclusive actions. This leads to the concept of a "captured" **query** that can no longer revise its belief level by acquiring additional inputs. We further extend the procedures by introducing the concept of a shielded input--an input that has no directed path from the **query**. Such **nodes** have limited impact on the **query**.

The second contribution is the development of an algorithm for converting a Bayesian belief network into a decision table. The **rules** (individual rows in the table) are minimal in the sense that every input in a **rule** is necessary to trigger the stopping condition. The table is also specifiably complete in that varying the parameters of the algorithm will vary the amount of the solution space covered by the table.

The two procedures have been in The Bayesian Network Cost Reduction

System (BANCORES) which supports ad hoc and repetitive queries. Empirical testing indicates substantial savings in input costs can be achieved using BANCORES instead of using a brute force solution methodology that acquires all inputs.

21/5/2 (Item 2 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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01326618 ORDER NO: AAD94-02462
A BRANCH AND BOUND ALGORITHM FOR SCHEDULING OPERATIONS AND ASSIGNING TOOLS
IN A FLEXIBLE MANUFACTURING SYSTEM (TOOL ASSIGNMENT)
Author: FRASER, KATHLEEN TESTO
Degree: PH.D.
Year: 1993
Corporate Source/Institution: SYRACUSE UNIVERSITY (0659)
ADVISER: JOEL STINSON
Source: VOLUME 54/08-A OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 3108. 237 PAGES
Descriptors: BUSINESS ADMINISTRATION, MANAGEMENT; ENGINEERING,
SYSTEM SCIENCE
Descriptor Codes: 0454; 0790

In this dissertation, a branch and bound algorithm is presented for optimally solving a set of scheduling and tool loading problems on a Flexible Manufacturing System (F.M.S.). The algorithm seeks to develop a feasible set of start times for all operations within a set of jobs, and to simultaneously allocate tools to machines to perform these operations such that all due dates are met, or total weighted tardiness measures are minimized. If total weighted tardiness is zero, (i.e. all due dates are met), the secondary objective of producing a schedule which maximizes the slack of the job that has the least slack is pursued. The solution is constrained by both technological (precedence) and resource (tool magazine capacity and machine capacity) constraints.

The scheduling problem in an F.M.S. is significantly more complex than the general class of multiple resource-constrained scheduling problems because: (1) Each machine is quite versatile and is capable of performing many different operations. (2) The system can machine several parts simultaneously. (3) Each part may have alternate routes through the system. Consequently, optimally scheduling operations and allocating tools in an F.M.S. rapidly becomes very difficult if realistic sized problems are considered.

The algorithm addresses this concern through capitalizing on the special structure of these problems and realizes computational efficiencies through the following: (1) Two heuristics for producing upper bounds. These upper bounds are used in conjunction with the lower bound to prune inferior nodes from the tree. (2) Dominance rules which are applied when branching from each node of the branch and bound tree. (3) A decision vector which is used to select an active node from which to branch, and to guide the search through the tree for improved upper bounds. (4) A lower bound which combines precedence and resource constraints.

Extensive computational tests have been conducted using the branch and bound algorithm. These tests include 34,400 randomly generated problems ranging from 1 to 17 jobs containing 2 to 4 operations each in Flexible Manufacturing Systems ranging in size from 5 to 10 machines. The results indicate a good deal of success in solving realistic sized problems.

21/5/3 (Item 3 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online
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1065727 ORDER NO: AAD89-09671
THE DESIGN AND ANALYSIS OF ALGORITHM AND DATA STRUCTURE FOR EFFICIENT
SOLUTIONS OF MINIMUM-COST NETWORK FLOW PROBLEMS ON MISC AND MIMD
Author: HO, SHAN-HUI
Degree: PH.D.
Year: 1988
Corporate Source/Institution: THE UNIVERSITY OF TEXAS AT AUSTIN (0227)
SUPERVISOR: JOHN R. MOTE
Source: VOLUME 50/04-A OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 817. 203 PAGES
Descriptors: INFORMATION SCIENCE; BUSINESS ADMINISTRATION, GENERAL
; COMPUTER SCIENCE; ARTIFICIAL INTELLIGENCE
Descriptor Codes: 0723; 0310; 0984; 0800

Minimum-cost network flow problems have a surprising range of users. Many operation, production, communication, and financial problems that are seemingly quite different can be solved as instances of the minimum-cost network flow problem.

In this methodology the network structures of a simplex code have been improved to contain a network model structure, a two-stage search tree for a pricing system, and a basis structure. The network model structure is associated with a set of list functions. The structure of a pricing system is proposed as an intelligent two-stage search tree by employing an artificial intelligence (AI) search method. A preparation stage uses different sorting methods to select the most eligible arcs from the candidate list. Then the second stage, a branching stage, uses one of the arcs to do a pivot on a basis structure. This basis structure can be built as a spanning tree by a set of the ATR calculations. Because this code applies a specialized design to network structures and an artificial intelligence search method to the pricing rule, it is one of the fastest codes to date.

The relaxation-plus method presented here employs a newly invented AI search method to enumerate a dynamic two-stage search tree to provide the most eligible node with the highest estimated deficit and then process that node through the dual gradient method.

A decision support system (DSS) is a man-machine system that support decision making in an unstructured environments. The need for a high performance DSS intensifies in a number of dimensions including, (1) user friendliness, (2) intelligence exhibited in solving problems, (3) problem mechanism, (4) computational speed. This research addresses the high performance issue as an aspect of DSS's from a parallel computation aspect. First, a generalized data flow model is presented to take advantage of parallelism in system design and analysis. Secondly, based upon the theory of decomposition and data dependency, the parallel relaxation method is developed using a generalized data flow modeling approach. Analytical tests are carried out on Balance 21000, which is supported by a DYNIX parallel operating system, a version of UNIX 4.2 bsd. (Abstract shortened with permission of author.)

21/5/4 (Item 4 from file: 35)
 DIALOG(R)File 35:Dissertation Abs Online
 (c) 2009 ProQuest Info&Learning. All rts. reserv.
 846726 ORDER NO: AAB84-13446
 PRODUCTION PLANNING OF CAPACITATED, MULTI-STAGE, DISCRETE MANUFACTURING SYSTEMS
 Author: KASPER, MARTIN
 Degree: PH.D.
 Year: 1983
 Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, BERKELEY (0028)
 Source: VOLUME 45/03-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
 PAGE 967. 230 PAGES
 Descriptors: ENGINEERING, INDUSTRIAL
 Descriptor Codes: 0546

A hierarchical approach is presented for planning production in capacitated, multi-stage, discrete manufacturing systems. The planning problem is partitioned into two phases along organizational lines. First, the basic trade-offs inherent in production planning decisions on a tactical level are represented by means of an aggregate model. Second, high-level plans are disaggregated into efficient and feasible operational schedules using heuristics.

To reduce the size of the problem, nodes in the detailed product structure network are combined to aggregates. Each of the aggregation concepts that is applied preserves the parameters of resource use and transfer relationships accurately. Used in conjunction with time grid aggregation, the product structure aggregation succeeds in reducing the long range planning model to dimensions readily handled by available computer codes. A linear programming model is used to dynamically determine the best trade-off between keeping inventories and adjusting production rates to changing demand levels, while observing item flow and resource use constraints.

Capacity bounds and production milestones set by the aggregate model serve as the framework in which the detailed scheduling heuristics operate. A dependent requirements explosion, similar to Material Requirements Planning (MRP), is used for consistent disaggregation. In contrast to MRP, the algorithm uses variable, load-based offsets to smooth work loads. Priority based scheduling rules guarantee feasibility and efficiency.

The set of models is proposed as an effective tool for planning in systems in which resources can be preallocated to production stages. The models attempt to bridge the existing gap between techniques like MRP or Kanban, applied in industry, which give very suboptimal results, and theoretical approaches presented in the literature, too limited in scope to be applicable. Simulations show that the proposed models generally outperform existing approaches and can be implemented on a large-scale basis.

21/5/5 (Item 1 from file: 2)
 DIALOG(R)File 2:INSPEC
 (c) 2009 The IET. All rts. reserv.
 08049356
 Title: Feature weighted ensemble classifiers—a modified decision scheme
 Authors(s): Jorgensen, T.M.; Linneberg, C.
 Author Affiliation: Riso Nat. Lab., Roskilde, Denmark
 Book Title: Multiple Classifier Systems. Second International Workshop, MCS 2001. Proceedings (Lecture Notes in Computer Science Vol.2096)

Inclusive Page Numbers: 218-27
 Publisher: Springer-Verlag, Berlin
 Country of Publication: Germany
 Publication Date: 2001
 Conference Title: Multiple Classifier Systems. Second International Workshop, MCS 2001. Proceedings
 Conference Date: 2-4 July 2001
 Conference Location: Cambridge, UK
 Conference Sponsor: Univ. Surrey Univ. Cagliari Int. Assoc. Pattern Recognition et al
 Editor(s): Kittler, J.; Roli, F.
 ISBN: 3 540 42284 6
 Number of Pages: xii+456
 Language: English
 Document Type: Conference Paper (PA)
 Treatment: Practical (P); Theoretical or Mathematical (T)
 Abstract: In order to determine the output from an aggregated classifier a number of methods exist. A common approach is to apply the majority-voting scheme. If the performance of the classifiers can be ranked in some intelligent way, the voting process can be modified by assigning individual weights to each of the ensemble members. For some base classifiers, like decision trees, a given node or leaf is activated if the input lies within a well-defined region in input space. In other words, each leaf-node can be considered as defining a given feature in input space. We present a method for adjusting the voting process of an ensemble by assigning individual weights to this set of features, implying that different nodes of the same decision tree can contribute differently to the overall voting process. By using a randomised look-up technique for the training examples the weights used in the decision process is determined using a perceptron-like learning rule. We present results obtained by applying such a technique to bagged ensembles of C4.5 trees and to the so-called PERT classifier, which is an ensemble of highly randomised decision trees. The proposed technique is compared to the majority-voting scheme on a number of data sets (19 refs.)
 Subfile(s): C (Computing & Control Engineering)
 Descriptors: decision trees; learning by example; pattern classification
 Identifiers: feature weighted ensemble classifiers; modified decision scheme; aggregated classifier; majority voting scheme; decision trees; randomised look-up technique; training examples; perceptron-like learning rule; C4.5 trees; PERT classifier; data sets
 Classification Codes: C6170K (Knowledge engineering techniques); C1250 (Pattern recognition); C1230L (Learning in AI); C1160 (Combinatorial mathematics)
 INSPEC Update Issue: 2001-038
 Copyright: 2001, IEE

21/5/6 (Item 2 from file: 2)
 DIALOG(R)File 2:INSPEC
 (c) 2009 The IET. All rts. reserv.
 06732638
 Title: Arc crossing minimization in hierarchical digraphs with tabu search
 Author(s): Laguna, M.; Marti, R.; Valls, V.
 Author Affiliation: Graduate Sch. of Bus., Colorado Univ., Boulder, CO, USA
 Journal: Computers & Operations Research, vol.24, no.12, pp.1175-86
 Publisher: Elsevier

Country of Publication: UK
 Publication Date: Dec. 1997
 ISSN: 0305-0548
 SICI: 0305-0548(199712)24:12L;1-75:CMHD;1-D
 CODEN: CMORAP
 U.S. Copyright Clearance Center Code: 0305-0548/97/\$17.00+0.00
 Language: English
 Document Type: Journal Paper (JP)
 Treatment: Theoretical or Mathematical (T)
 Abstract: Graphs are used commonly as a basic modeling tool in areas such as project management, production scheduling, line balancing, business process reengineering, and software visualization. An important problem in the area of graph drawing is to minimize the crossings in a multi-layer hierarchical digraph. Existing solution methods for this problem are based on simple ordering rules for single layers that may lead to inferior drawings. The article first introduces an extensive review of relevant work previously published in this area. Then a tabu search implementation is presented that seeks high-quality drawings by means of an intensification phase that finds a local optimum according to an insertion mechanism and two levels of diversification. Computational experiments with 200 graphs with up to 30 nodes per layer and up to 30 layers are presented to assess the merit of the method (26 refs.)
 Subfile(s): C (Computing & Control Engineering); E (Mechanical & Production Engineering)
 Descriptors: data visualisation; directed graphs; minimisation; operations research; production control; project management; search problems; software engineering; systems re-engineering
 Identifiers: arc crossing minimization; tabu search; modeling; project management; production scheduling; line balancing; business process reengineering; software visualization; graph drawing; multi-layer hierarchical digraph; ordering rules; single layers; high-quality drawings; intensification phase; local optimum; insertion mechanism; diversification; computational experiments; nodes
 Classification Codes: C1160 (Combinatorial mathematics); C1180 (Optimisation techniques); C1290 (Applications of systems theory); E1010 (Production management)
 INSPEC Update Issue: 1997-043
 Copyright: 1997, IEE

21/5/7 (Item 3 from file: 2)
 DIALOG(R)File 2:INSPEC
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 06330701
 Title: Efficient coding of wavelet trees and its applications in image coding
 Author(s): Zhu, B.; Yang, E.-H.; Tewfik, A.H.; Kieffer, J.C.
 Author Affiliation: Dept. of Electr. Eng., Minnesota Univ., Minneapolis, MN, USA
 Journal: Proceedings of the SPIE - The International Society for Optical Engineering, vol. 2727, pp.512-23
 Publisher: SPIE-Int. Soc. Opt. Eng
 Country of Publication: USA
 Publication Date: 1996
 Conference Title: Visual Communications and Image Processing '96
 Conference Date: 17-20 March 1996
 Conference Location: Orlando, FL, USA

Conference Sponsor: SPIE IEEE

ISSN: 0277-786X

SICI: 0277-786X(1996)2727:2L.512:ECWT;1-Z

CODEN: PSISDG

U.S. Copyright Clearance Center Code: 0 8194 2103 0/96/\$6.00

Language: English

Document Type: Conference Paper in Journal (PA)

Treatment: Theoretical or Mathematical (T)

Abstract: We propose in this paper a novel lossless tree coding algorithm.

The technique is a direct extension of the bisection method. A reduction rule is used to obtain the irreducible representation of a tree, and this irreducible tree is entropy-coded instead of the input tree itself. This reduction is reversible, and the original tree can be fully recovered from its irreducible representation. More specifically, we search for equivalent subtrees from top to bottom. When equivalent subtrees are found, a special symbol is appended to the value of the root node of the first equivalent subtree, and the root node of the second subtree is assigned to the index which points to the first subtree, and all other nodes in the second subtrees are removed. This procedure is repeated until it cannot be reduced further. This yields the irreducible tree or irreducible representation of the original tree. The proposed method can effectively remove the redundancy in an image, and results in more efficient compression. It is proved that when the tree size approaches infinity, the proposed method offers the optimal compression performance. It is generally more efficient in practice than direct coding of the input tree. The proposed method can be directly applied to code wavelet trees in non-iterative wavelet-based image coding schemes. A modified method is also proposed for coding wavelet zerotrees in embedded zerotree wavelet (EZW) image coding. Although its coding efficiency is slightly reduced, the modified version maintains exact control of bit rate and the scalability of the bit stream in EZW coding (8 refs.)

Subfile(s): B (Electrical & Electronic Engineering); C (Computing & Control Engineering)

Descriptors: data compression; entropy codes; image coding; image representation; image resolution; trees (mathematics); wavelet transforms

Identifiers: wavelet tree coding; image coding; lossless tree coding algorithm; bisection method; reduction rule; entropy codes; equivalent subtrees; irreducible representation; efficient compression; optimal compression performance; code wavelet trees; non-iterative wavelet-based image coding schemes; embedded zerotree wavelet image coding; EZW coding; image compression

Classification Codes: B6140C (Optical information, image and video signal processing); B6120B (Codes); B0290Z (Other numerical methods); B0250 (Combinatorial mathematics); C5260B (Computer vision and image processing techniques); C4190 (Other numerical methods); C1160 (Combinatorial mathematics)

INSPEC Update Issue: 1996-030

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21/5/8 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC
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05439323

Title: Optimization of detection networks. II. Tree structures

Authors(s): Tang, Z.-B.; Pattipati, K.R.; Kleinman, D.L.

Author Affiliation: Dept. of Electr. & Syst. Eng., Connecticut Univ., Storrs, CT, USA

Journal: IEEE Transactions on Systems, Man and Cybernetics, vol.23, no.1, pp.211-21

Country of Publication: USA

Publication Date: Jan.-Feb. 1993

ISSN: 0018-9472

CODEN: ISYMAW

U.S. Copyright Clearance Center Code: 0018-9472/93/\$03.00

Item Identifier (DOI): <http://dx.doi.org/10.1109/21.214779>

Language: English

Document Type: Journal Paper (JP)

Treatment: Theoretical or Mathematical (T)

Abstract: A distributed binary detection problem with multimessage (≥ 1 bit) communications is considered, wherein the nodes (sensors, decision-makers (DMs)) of the system are organized in the form of a tree with multiple root nodes. A numerical algorithm is developed for determining the optimal decision rule at each node assuming monotone cost functions imposed only on the root nodes. It is assumed that the observations of each node are conditionally independent of those of the other nodes. It is shown that the problem is equivalent to solving a nonlinear optimal control problem, and the necessary conditions of optimality using Bayes' risk as the optimization criterion are derived. The optimal control approach provides an interpretation of certain functions of the co-state variables in terms of thresholds, and leads to a computationally efficient min-H algorithm to solve for the optimal decision rule at each node. The numerical algorithm provides a tool to investigate the organizational issues of adaptation, structure, and robustness (40 refs.)

Subfile(s): B (Electrical & Electronic Engineering); C (Computing & Control Engineering)

Descriptors: Bayes methods; optimal control; optimisation; trees (mathematics)

Identifiers: multimessage communications; tree structures; detection networks; distributed binary detection problem; multiple root nodes; monotone cost functions; Bayes' risk; optimization criterion; optimal control; co-state variables; thresholds; min-H algorithm; organizational issues

Classification Codes: B0260 (Optimization techniques); B0250 (Combinatorial mathematics); B0240E (Game theory); C1180 (Optimisation techniques); C1160 (Combinatorial mathematics); C1330 (Optimal control); C1140E (Game theory)

INSPEC Update Issue: 1993-026

Copyright: 1993, IEE

21/5/9 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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05226561

Title: A truncation technique for clausal analytic tableaux

Authors(s): Wrightson, G.; Coldwell, J.

Author Affiliation: Dept. of Comput. Sci., Newcastle Univ., NSW, Australia

Journal: Information Processing Letters, vol.42, no.5, pp.273-81

Country of Publication: Netherlands
Publication Date: 3 July 1992
ISSN: 0020-0190
CODEN: IFPLAT
U.S. Copyright Clearance Center Code: 0020-0190/92/\$05.00
Language: English
Document Type: Journal Paper (JP)
Treatment: Theoretical or Mathematical (T)
Abstract: Although merging of literals in resolvent clauses is necessary to ensure the completeness of resolution theorem proving, there is no equivalent in the tableau method. However, by using the modified control structure, the authors demonstrate the feasibility of using a modified form of the merging rule-the branch-merge-when developing analytic tableaux. Since all nodes that are not on the leftmost open branch, are at most just one level from this branch, the subset requirements for a successful branch-merge can be assumed to exist. This removes the necessity of searching for anything other than a leaf node to merge with (9 refs.)
Subfile(s): C (Computing & Control Engineering)
Descriptors: formal logic; theorem proving
Identifiers: clausal analytic tableaux; resolvent clauses; resolution theorem proving; modified control structure; merging rule; branch-merge; leftmost open branch; leaf node
Classification Codes: C4210 (Formal logic)
INSPEC Update Issue: 1992-040
Copyright: 1992, IEE

21/5/10 (Item 1 from file: 60)
DIALOG(R)File 60:ANTE: Abstracts in New Tech & Engineer
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0002329756 IP ACCESSION NO: 20082003417
Sorting/merging tree for determining a next tournament champion in each cycle by simultaneously comparing records in a path of the previous tournament champion
Garcia, Leslie C; Lindquist, David B; Rollo, Gerald F, USA
PUBLISHER URL:
<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netaht ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5287494.PN.&OS=pn/5287494&RS=PN/5287494>

DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
FILE SEGMENT: ANTE: Abstracts in New Technologies and Engineering
ABSTRACT:

A tree sorter having hardware logic node registers and output selectors plus comparators enables a vector processor to perform sort and merge operations. A system and method of providing one output record each cycle provides performance enhancement over similar scalar operation. Storage to storage traffic is drastically reduced because the hardware tree and update logic is implemented in the Vector Processor. Vector registers provide input data to the hardware tree structure. Output records sorted by key together with address ID are placed in storage. Multiple Vector count and multiple Vector Interruption Index (VIX) operation, string length and merge masks are used in conjunction with a vector merge instruction. The data input record

key field has both long and short formats. Actual key data or codewords may be used. The vector merge forms a new codeword when compare equal codewords are encountered. By storing sorted keys (codewords) plus the address ID, reuse of codewords (in formation of longer strings, etc.) is made possible.

DESCRIPTORS: Mathematical analysis; Vectors (mathematics); ~~Trees~~;
Hardware; Strings; Microprocessors; ~~Registers~~; Comparators; Sorting
; ~~Business~~ machines; Traffic flow; Selectors; Reuse; Traffic
engineering; Masks; Counting; Scalars; Interruption; Keys; Performance
enhancement; Storage

21/5/11 (Item 2 from file: 60)
DIALOG(R)File 60:ANTE: Abstracts in New Tech & Engineer
(c) 2009 CSA. All rts. reserv.
0001568404 IP ACCESSION NO: 20081184541
Software testing system that employs a graphical interface to generate test
cases configured as hybrid ~~tree structures~~

Baer, William J; Leung, Paul C, USA
PUBLISHER URL:
[http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netahml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5414836.PN.&OS=pn/5414836&RS=PN/5414836](http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netah/ml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5414836.PN.&OS=pn/5414836&RS=PN/5414836)
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
FILE SEGMENT: ANTE: Abstracts in New Technologies and Engineering
ABSTRACT:

A data processing system enables a user to generate test cases that exercise a program under test. The data processing system includes a display, a keyboard input and memory for storing a library of node types including AND, OR, Decision and Content nodes, node linking data and a graphical user interface procedure. A central processor controls the display, input keyboard and memory and in response to user inputs, creates a data base in memory that defines a hybrid ~~tree structure~~ that includes a plurality of node data ~~structures~~. Each AND node data ~~structure~~ is connected by links to a plurality of ~~child node data structures~~, each link to a child node data ~~structure~~ defining a sequence order value among all ~~child node data structures~~ linked to the AND node data ~~structure~~. Each sequence order value defines a position in a sequence in which information is placed in the test case by traversal of the associated ~~child node data structure~~. OR node data ~~structures~~ include an ability to set probabilities of visitation during traversal of a ~~tree structure~~ and Content node data ~~structures~~ enable definitions of a numerical set range and a probability that a randomly chosen value will be inside or outside the range. All AND, OR and Content node data ~~structures~~ have a looping attribute which defines how many times the node and its children will be revisited during execution of the ~~tree structure~~. A Decision Node directs further traversal of the ~~tree~~ dependent upon the achievement of a condition ~~statement~~.

DESCRIPTORS: Data ~~structures~~; ~~Trees~~; Keyboards; Data processing
; Graphical user interface; Databases; C (programming language);
Microprocessors; Computer programs; Software; Joining; ~~Business~~
machines; Libraries; Children; Control equipment; Linking; Storage

21/5/12 (Item 3 from file: 60)
DIALOG(R)File 60:ANTE: Abstracts in New Tech & Engineer
(c) 2009 CSA. All rts. reserv.
0001456708 IP ACCESSION NO: 20080973912
Method and system for analyzing the logical structure of a document

Tateishi, Yuka, USA
PUBLISHER URL:
<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netahtml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5669007.PN.&OS=pn/5669007&RS=PN/5669007>
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
FILE SEGMENT: ANTE: Abstracts in New Technologies and Engineering
ABSTRACT:

An input document is matched with predetermined patterns on a line-by-line basis, whereby it can be assigned a plurality of pairs of attributes and costs. When the process for the whole document is completed, in accordance with a rule specifying the combination of attributes between the adjacent lines, the nodes of a graph are generated, the nodes are linked with each other, and costs are given to the node and links. There is a plurality of paths for traveling the graph from the root node to the final node, and each of them means the interpretation of a possible logical structure of the document. By summing the costs for the traveled nodes and links, a total cost value can be associated with each path, and by prioritizing by this total cost value, a plurality of logical structure interpretations can be sequentially shown from the most plausible path (logical structure interpretation). A chosen logical structure is tagged as required.

DESCRIPTORS: Business machines; Roots

21/5/13 (Item 4 from file: 60)
DIALOG(R)File 60:ANTE: Abstracts in New Tech & Engineer
(c) 2009 CSA. All rts. reserv.
0001243832 IP ACCESSION NO: 20080834757
System for compressing a search tree structure used in rule classification

Corl Jr, Everett A; Davis, Gordon T; Heddes, Marco; Patel, Piyush C;
Sabbikhi, Ravinder K, USA
PUBLISHER URL:
<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netahtml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=7366728.PN.&OS=pn/7366728&RS=PN/7366728>
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
FILE SEGMENT: ANTE: Abstracts in New Technologies and Engineering

ABSTRACT:
The present invention relates to a method and system for compressing a tree structure. The method of the present invention includes providing a compressed format block for representing a plurality of levels

of the **tree** structure, where the plurality of levels comprises a set of **nodes**. The method also includes compressing each **node** in the set of **nodes** into the compressed format block, such that the plurality of levels is traversed in a single memory access.

DESCRIPTORS: **Trees**; Compressing; Inventions; Blocking; Classification
; **Business** machines

21/5/14 (Item 5 from file: 60)
DIALOG(R)File 60:ANTE: Abstracts in New Tech & Engineer
(c) 2009 CSA. All rts. reserv.
0000835221 IP ACCESSION NO: 2008514851
Database management system, method and program for supporting the mutation
of a composite object without read/write and write/write conflicts

Demichiel, Linda Gail; Fuh, Gene Y C; Jou, Michelle Mei-Chiou; Lindsay,
Bruce Gilbert; Mattos, Nelson Mendonca; Rielau, Serge Philippe; Tran, Brian
Thinh-Vinh, USA

PUBLISHER URL:

<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netahtml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5857182.PN.&OS=pn/5857182&RS=PN/5857182>

DOCUMENT TYPE: Patent

RECORD TYPE: Abstract

LANGUAGE: English

FILE SEGMENT: ANTE: Abstracts in New Technologies and Engineering

ABSTRACT:

The system, method, and program of this invention avoids potential write/write conflicts and read/write conflicts when a subcomponent of a composite object (e.g., an ADT) is mutated. The embodiments of this invention define a copy semantic for the mutation function. In one embodiment, a copy function is inserted prior to any mutation function. In another embodiment, a global compile-time analysis is performed to determine if a write/write or read/write conflict exists; and to eliminate redundant copy constructors if a conflict does exist. In a preferred embodiment, only a local analysis is performed during the parsing phase, thereby avoiding a global compile-time analysis. A mutation safe flag is associated with each parse **tree node**. A read target **leaf parse tree node** is set to false while non-**leaf parse tree nodes** (functions) derive their value from an incoming node, except that constructors and copy constructor functions are always true. Whether or not a copy is made of the composite object (i.e., whether or not a copy constructor is inserted) prior to a mutation is determined according to the setting of the mutation safe flags and according to the following. If a mutation safe flag for a mutation function is false, a copy constructor is inserted for the mutated composite object and the mutation safe flag is set to true. In addition, for update and trigger statements, the mutation safe flag for a mutated target is defaulted to true. Furthermore, related update entries are grouped together and a copy is generated for the common target. The generated copy is used as the common target for all of the mutations caused by the update entries grouped together in order to accumulate all of the desired mutations in a same copy of the composite object.

DESCRIPTORS: Mutations; Reproduction; Construction; Flags; **Trees**;
Inventions; Semantics; Genes; **Business** machines; Data base management systems

21/5/15 (Item 6 from file: 60)
DIALOG(R)File 60:ANTE: Abstracts in New Tech & Engineer
(c) 2009 CSA. All rts. reserv.
0000702147 IP ACCESSION NO: 2008429134
Method and system for processing queries in a database system using index
structures that are not native to the database system

Srinivasan, Jagannathan; Murthy, Ravi; Hong, Chin; Defazio, Samuel; Nori,
Anil, USA
PUBLISHER URL:
<http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&u=/netahtml/PTO/search-adv.htm&r=1&p=1&f=G&l=50&d=PTXT&S1=5893104.PN.&OS=pn/5893104&RS=PN/5893104>
DOCUMENT TYPE: Patent
RECORD TYPE: Abstract
LANGUAGE: English
FILE SEGMENT: ANTE: Abstracts in New Technologies and Engineering

ABSTRACT:

A method and apparatus for processing a query in a database system using index types that are not built into the database system are disclosed. Routines for managing an index structure that is not supported by a database system are generated. Data that identifies the routines are submitted to the database system, thereby 'registering' the index types with the database system. In response to statements issued to the database system by a client, the database system calls the routines, causing the routines to create an index structure using data from a data container in the database, and to generate data that indicates which data in the data container satisfies a query issued by the client. The routines of the registered index type extend the indexing capabilities of the database systems and one or more such index types can be registered with the database system. The index structure managed by the routines may be maintained within segments of the database, and the segments may be accessed as index-only tables. Storing a row of data in a database using index-only tables involves storing in a leaf node an index entry that includes a key value along with all other values in the row of data. If the row of data exceeds a predetermined size, then a portion of the row of data is stored in an overflow area. Retrieving a row of data from an index-only table for a user-supplied key involves identifying a leaf node for the key, and reading a row of data from the index entry and any remaining portion from the overflow area when the row exceeds the predetermined size.
DESCRIPTORS: Databases; Data base management systems; Queries; Tables; Tables (data); Containers; Storage; Shores; Indexing; Redwood

B. NPL Files, Full-text

File 9:Business & Industry(R) Jul/1994-2009/Nov 16
(c) 2009 Gale/Cengage
File 16:Gale Group PROMT(R) 1990-2009/Oct 22
(c) 2009 Gale/Cengage
File 148:Gale Group Trade & Industry DB 1976-2009/Nov 16
(c) 2009 Gale/Cengage

File 160:Gale Group PROMT(R) 1972-1989
 (c) 1999 The Gale Group
 File 275:Gale Group Computer DB(TM) 1983-2009/Oct 16
 (c) 2009 Gale/Cengage
 File 621:Gale Group New Prod.Annou.(R) 1985-2009/Oct 08
 (c) 2009 Gale/Cengage
 File 636:Gale Group Newsletter DB(TM) 1987-2009/Oct 22
 (c) 2009 Gale/Cengage
 File 674:Computer News Fulltext 1989-2006/Sep W1
 (c) 2006 IDG Communications
 File 647:UBM Computer Fulltext 1988-2009/Nov W3
 (c) 2009 UBM, LLC
 File 369:New Scientist 1994-2009/Nov W2
 (c) 2009 Reed Business Information Ltd.
 File 484:Periodical Abs Plustext 1986-2009/Nov 16
 (c) 2009 ProQuest
 File 47:Gale Group Magazine DB(TM) 1959-2009/Nov 03
 (c) 2009 Gale/Cengage
 File 634:San Jose Mercury Jun 1985-2009/Nov 13
 (c) 2009 San Jose Mercury News
 File 20:Dialog Global Reporter 1997-2009/Nov 17
 (c) 2009 Dialog
 File 15:ABI/Inform(R) 1971-2009/Nov 16
 (c) 2009 ProQuest Info&Learning
 File 624:McGraw-Hill Publications 1985-2009/Nov 17
 (c) 2009 McGraw-Hill Co. Inc

Set	Items	Description
S1	12359976	CATALOG? OR INVENTOR? OR REGISTER? OR LISTING?
S2	7094065	HIERARCH? OR TREE OR TREES OR STRUCTURE OR STRUCTURES
S3	1009945	(S1 OR S2) (10N) (CUSTOM? OR PERSONALIZ? OR PERSONALIS? OR U- NIQUE OR INDIVIDUAL? OR TAILOR? OR ADAPT? OR MODIF?)
S4	3200	(NODE OR NODES) (5N) (LEAF OR ANCESTOR OR CHILD OR PARENT OR ROOT OR TOP OR BOTTOM)
S5	18400594	RULE OR RULES OR INSTRUCTION OR INSTRUCTIONS OR STATEMENT - OR STATEMENTS
S6	327522	(CONSTRAINT OR CONSTRAINTS OR ITEM OR ITEMS) (10N) (SET OR S- ETS OR SUBSET OR SUBSETS OR SERIES OR AGGREGAT? OR COLLECT? OR GROUP?)
S7	14	S3(S)S4(S)S5
S8	6	S1(S)S2(S)S4(S)S5
S9	128	S2(S)S4(S)S5
S10	1	S9(S)S6
S11	73005993	BUSINESS OR COMMERCE OR ECOMMERCE OR B2B OR SALES OR SELL?
S12	6	S9(S)S11
S13	112	S9 AND (ATTRIBUTE? OR VALUE? OR NAME? OR IDENTIFICATION? OR ID OR IDS OR WEIGHT?)
S14	1649	S2(S)S5(S) (NODE OR NODES)
S15	746	S14(S) (S1 OR S6 OR S11)
S16	322	S14(S)S1
S17	81	S16(S)S3
S18	78	S17(S)S11
S19	11	S14(S)S1(S)S6(S)S11
S20	104	S7 OR S8 OR S10 OR S12 OR S18
S21	10	S20 NOT (PY>2001 OR PY>20010618)
S22	9	RD (unique items)

22/3,K/1 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c) 2009 Gale/Cengage. All rts. reserv.
06799483 SUPPLIER NUMBER: 15054976 (USE FORMAT 7 OR 9 FOR FULL TEXT)
NCR parallel announcements.
Fellows, William
Computergram International, CGI11180013
Nov 18, 1993
ISSN: 0268-716X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1220 LINE COUNT: 00097

... last week, Teradata users are promised continued support, limited upgrades and release 1.5.1 of the Teradata database through to 1995. Although revenue from sales of the two parallel lines has been roughly equal since April - and DBC/1012s are still being delivered - Neches says all new customers are being...

...architecture. BYnet will deliver the bigger bandwidths required for multimedia and other types of processing. NCR's brand of parallelism lies in the MIMD - multiple instruction multiple data - technology camp. MasPar Computer Corp and Thinking Machines Inc use an alternative SIMD - single instruction multiple data - form to deliver parallel processing. Within the MIMD camp there are shared memory and shared nothing architectures. IBM Corp's parallel systems are...
...NCR. It is at the interconnect that these systems finally differ - Intel and NCube preferring a mesh-type system of joining nodes with NCR using tree and folded-tree mechanisms. Despite a growing band of hopefuls in the world of massively parallel commercial systems - ICL Plc, NCube, IBM Corp and Meiko Scientific Ltd to mention a few - Neches says they are all delivering unproven, first generation technologies. Moreover, he believes, many are tying pricing structures for their systems too closely to the world of mainframe residuals, where terms are based on methods of discounting from a price customers would otherwise...

22/3,K/2 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2009 Gale/Cengage. All rts. reserv.
02277622 SUPPLIER NUMBER: 54082322 (USE FORMAT 7 OR 9 FOR FULL TEXT)
DATA MINING FOR DIRECT MAIL: A Lesson in Predictive Modeling.
SAARENVIRTA, GARY
Intelligent Enterprise, 2, 4, 41(1)
March 9, 1999
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 6161 LINE COUNT: 00504

... Intelligent Miner for Data permits interactive drill-down into all the presented visualizations. Figure 5 shows a tree model visualization. A tree model uses logical rules to split the data into smaller and smaller subsets. For example, a tree leaf could be defined by customers with tenure less than 50 months and total purchases greater than \$1,000. The highlighted leaf in Figure 5 has a response score of 0.69, and the rule generated by the tree applies to 52 records in the training set. The tree assigns scores to the records in a leaf by calculating the...

...that all the records in the leaf had an objective variable value of 1. A score of 0 implies that all the records in the leaf node had an objective variable value of 0. A score of 0 or 1 in a leaf node is very good; it implies that the tree rule used to create the leaf perfectly predicted a set of customer records. The rule used to identify the highlighted leaf used 13 logical tests to split the data.

Figure 6 shows the results visualization for RBF regression. One...

22/3,K/3 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2009 Gale/Cengage. All rts. reserv.
01943475 SUPPLIER NUMBER: 18316018 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Talk to any database the COM way using the OLE DB interface. (Technology
Tutorial) (Tutorial)
Rauch, Stephen
Microsoft Systems Journal, v11, n7, p19(18)
July, 1996
DOCUMENT TYPE: Tutorial ISSN: 0889-9932 LANGUAGE: English
RECORD TYPE: Fulltext; Abstract
WORD COUNT: 7617 LINE COUNT: 00631

... altering, creating, and deleting attributes and properties of a data source, especially record layouts, field definitions, key fields, and file locations.

The shape of a tree for a SQL statement SELECT * FROM CUSTOMERS ORDER BY CITY is shown in Figure 11. Representing each node as a rectangle, the top portion represents an operator (SELECT, FROM, WHERE), the bottom left portion of the rectangle is the FirstChild and the bottom right portion of the rectangle...

22/3,K/4 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2009 Gale/Cengage. All rts. reserv.
01521911 SUPPLIER NUMBER: 12353483 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Bit-tree: a data structure for fast file processing. (Technical)
Ferguson, David E.
Communications of the ACM, v35, n6, p114(7)
June, 1992
DOCUMENT TYPE: Technical ISSN: 0001-0782 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 5104 LINE COUNT: 00367

... last byte, and one pair differing from the next in one of the first bytes.

Finally, a fair amount of computing time is spent searching leaf nodes. Because Bit-Tree entries are a fixed length, the coding can be much more efficient. In the implementation described here, the number of cycles to inspect a Prefix B-Tree entry is 184 while the number of cycles to inspect a Bit-Tree entry is 42. Furthermore, inspecting Prefix B-Tree entries requires instruction modification on the IBM System/36 whereas inspecting Bit-Tree entries does not. This can be disastrous for reentrant programs.

Using a Bit-Tree, an additional input operation must be done for an "add" operation...

22/3,K/5 (Item 4 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2009 Gale/Cengage. All rts. reserv.
01491150 SUPPLIER NUMBER: 12610308
A framework for neural net specification. (Technical)
Smith, Leslie S.
IEEE Transactions on Software Engineering, v18, n7, p601(12)
July, 1992
DOCUMENT TYPE: Technical ISSN: 0098-5589 LANGUAGE: ENGLISH
RECORD TYPE: ABSTRACT

ABSTRACT: Neural networks are usually specified in terms of their processing elements, the topology in which the elements are arranged, the adaptation rule and the net update dynamics. Most network-specification notation is informal; it may not be precise enough to allow easy implementation of a complex network...

...of ports; each pair of ports is associated with a node, and the entire network exists within an environment. The formal notation defines dynamics and adaptation at each processing element, allowing specifications to be built hierarchically and used as generators for nodes or in a top-down manner.

22/3,K/6 (Item 5 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
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01448098 SUPPLIER NUMBER: 11203427 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Expanding a hierarchy. (how Microsoft SQL Server handles multilevel relationships in data base tables) (tutorial)
Vicik, Rick
DBMS, v4, n10, p68(2)
Sept, 1991
DOCUMENT TYPE: tutorial ISSN: 1041-5173 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2475 LINE COUNT: 00230

... the SQL*Plus pseudo column called LEVEL. Whenever a tree-structured query selects a row, it calculates how far the present row is from the root node selected by the START WITH clause. This number is available to us in the pseudo-column called LEVEL. Rows retrieved by the START WITH clause...

...branch parallel to the first will generate the same LEVEL numbers as the first branch did, as you can see in Figure 2, or in Listing 8 by comparing BACK through KNEE to ARM through FINGER.

Skipping a row because it fails the WHERE clause creates

22/3,K/7 (Item 6 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2009 Gale/Cengage. All rts. reserv.
01320028 SUPPLIER NUMBER: 08044126 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Compiling at a moving target. (Advanced Cross Language System compiler tools)
Jones, Chris

EXE, v4, n7, p70(2)
Dec, 1989
ISSN: 0268-6872 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1820 LINE COUNT: 00139

... selected as the result register, then the code generated by Template #1 would be:

LEA result, A0

The next node visited in a bottom-up tree walk is labelled a. Once again, Template #1 matches the StaticReference operator resulting in the situation shown in Figure 4. note also that the match of Template #1 at the node labelled result has been reduced to a 'decoration' - sorry about the seasonal terminology - on the statement tree. At Figure 5 a new template, Template #2, has been found to match the PointerDereferenceAnyPtr operator labelled *. The size attribute value of 4 means that...

...cost is 6 bytes and 4 machines cycles. Here is the code that it would generate, if A0 and D0 were selected as its input register (or 'use tn') and result register ('eval tn') respectively:

MOVE.L (A0), D0

As expected, the match of the node labelled a has been reduced to a decoration.

The next template...

...case, Template #7 is a combination of a template covering just the = node and the absolute long address mode.

When the costing pass over the statement tree is complete, the task of selecting templates is a simple one. At the root node, the least expensive template is selected. Then, using a recursive algorithm, the root of each subtree not covered by the selected template is visited. From this is built the 'template tree' on which subsequent passes, such as the register allocation pass, will operate. Unfortunately, there is no room here to describe these passes; these belong, as Enid Blyton might put it, to another story.

22/3,K/8 (Item 7 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2009 Gale/Cengage. All rts. reserv.
01242184 SUPPLIER NUMBER: 06566599 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The age of GoldWorks. (Software Review) (Cover suite: expert systems) (evaluation)
Levine, Ken
PC Tech Journal, v6, n5, p68(11)
May, 1988
DOCUMENT TYPE: evaluation ISSN: 0738-0194 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 9246 LINE COUNT: 00731

... everything required that has an extra disk drive but not a modem.

GoldWorks is an excellent choice for this application because it combines frames and rules whose clauses can match from instance patterns, its rule sets limit searches during inferencing, and its developer's interface and screen toolkit can customize menu interfaces. Modeling the domain. The Expert Configurer models each configuration as a hierarchy (tree) of objects, including constraints on possible combinations. The system uses configuration trees (all possible configurations for the system), inventory trees (actual

equipment in stock), and order trees (all customer-acceptable configurations).

Each configuration tree represents a set of possible computer configuration. Child nodes represent components and subcomponents needed for the system, and

22/3,K/9 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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00630840 92-45780

A Truncation Technique for Clausal Analytic Tableaux

Wrightson, Graham; Coldwell, Jo

Information Processing Letters v42n5 PP: 273-281 Jul 3, 1992

ISSN: 0020-0190 JRNL CODE: IPL

...ABSTRACT: the completeness of resolution theorem proving, there is no equivalent in the tableau method. However, the feasibility of using a modified form of the merging rule - the branch-merge - when developing analytic tableaux is demonstrated through the use of the modified control structure. Since all nodes that are not on the leftmost open branch are at most just one level from that branch, the subset requirements for a successful branch-merge can be assumed to exist. This removes the necessity of searching for anything other than a leaf node to merge with. The results show that: 1. there appears to have been no development of such a truncation rule for analytic tableaux to date, 2. the tableau method has shown remarkable performance rivaling that of resolution, and 3. the branch-merge rule can be included in the control structure of analytic tableaux without affecting the completeness of the method.